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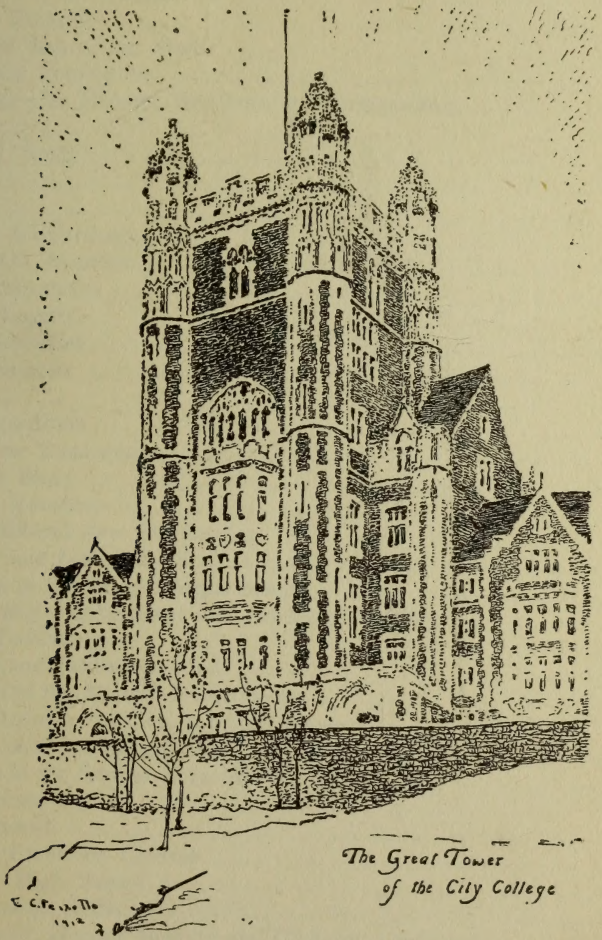
The College of the City of New York



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Annual Register, 1920-1921

THE COLLEGE OF THE CITY OF NEW YORK



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ANNUAL REGISTER FOR 1920-1921

Issued in December, 1920

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COLLEGIATE CALENDAR

1920-1921

1920.

July 1, Thursday, Beginning of the Summer Session.

Aug. 24, Tuesday, End of the Summer Session.

Sept. 15, Wednesday, Registration Day.

Sept. 16, Thursday, Beginning of Recitations, Fall Term.

Oct. 12, Tuesday, Columbus Day.

Nov. 2, Tuesday, Election Day.

Nov. 12, Friday, Prize Speaking.

Nov. 26, Thursday, Thanksgiving Day.

Dec. 25, Saturday, } Winter Vacation.
1921. Jan. 2, Sunday, }

Jan. 17, Monday, Beginning of Examinations.

Feb. 2, Wednesday, Registration Day.

Feb. 3, Thursday, Beginning of Recitations, Spring Term.

Feb. 12, Saturday, Lincoln's Birthday.

Feb. 22, Tuesday, Washington's Birthday.

Mar. 25, Friday, } Spring Vacation.
Apr. 3, Sunday, }

May 13, Friday, Prize Speaking.

May 30, Monday, Memorial Day.

June 6, Monday, Beginning of Examinations.

June 23, Thursday, Commencement.

July 1, Friday, Beginning of the Summer Session.

Aug. 24, Wednesday, End of the Summer Session.

Sept. 21, Wednesday, Registration Day.

Sept. 22, Thursday, Beginning of Recitations, Fall Term.

BOARD OF TRUSTEES

GEORGE MCANENY, *Chairman*

JAMES W. HYDE, *Secretary*

	Term Expires July 1st
CHARLES H. TUTTLE, A.B., LL.B.	1921
ALBERT WEISS	1922
JAMES W. HYDE, A.B., LL.B.	1923
WILLIAM P. LARKIN, A.B., LL.B., LL.D.	1924
GEORGE MCANENY, LL.D.	1925
MOSES J. STROOCK, B.S., LL.B.	1926
WILLIAM F. MCCOMBS, A.B., LL.B., LL.D.	1927
LEE KOHNS, B.S.	1928
FREDERICK P. BELLAMY, A.M., LL.B.	1929
ANNING S. PRALL	[*Ex-officio*]

OFFICERS OF ADMINISTRATION

SIDNEY EDWARD MEZES, Ph.D., LL.D., President, and Dean *pro tempore* of the School of Technology

CARLETON L. BROWNSON, Ph.D., Dean of the College of Liberal Arts and Science

FREDERICK B. ROBINSON, Ph.D., Dean of the School of Business and Civic Administration, and Director of the Evening Session

CHARLES BASKERVILLE, Ph.D., Director of the Chemistry Building

THOMAS ANDREW STOREY, Ph.D., M.D., Director of the Hygiene Building and of the Stadium

PAUL KLAPPER, Ph.D., Director of Extension Courses and of the Summer Session

MARIO EMILIO COSENZA, Ph.D., Director of the Preparatory High School

FREDERICK G. REYNOLDS, Sc.D., Secretary of the Faculty

HOMER CURTIS NEWTON, Ph.D., Librarian

ALLAN P. BALL, Ph.D., Editor of the Register.

PAUL H. LINEHAN, Ph.D., Assistant Director of the Evening Session

G. PAYN QUACKENBOS, Ph.D., Assistant Director of the Preparatory High School

HOWARD C. GREEN, A.B., Assistant to the Director of the Evening Session, in Charge of the Commerce Building

ADELBERT GRANT FRADENBURGH, Ph.D., Assistant to the Director of the Evening Session, in Charge of the Brooklyn Branch

CHARLES H. TEETER, B.A., in Charge of Courses in the Municipal Building

HARRIET L. MCCARTIE, Secretary to the President

ROBERT V. DAVIS, Curator

RICHARD JAHN, Assistant Curator

MORTON GOTTSCHALL, J.D., Recorder

SAMUEL NEWMAN, Recorder in Townsend Harris Hall

HENRY T. ALDEN, Recorder in the Brooklyn Branch

HENRY E. BLISS, Deputy Librarian

THOMAS GEORGE SCHWARTZ, A.B., Assistant in the Library

S. RIDLEY PARKER, B.A., Librarian in the Brooklyn Branch

MARGARET B. JAMES, Library Assistant in Townsend Harris Hall

WALTER STALB, Bursar

COUNCIL OF DELEGATES

THE PRESIDENT (*ex officio*)

From the College of Liberal Arts and Science:

DEAN BROWNSON (*ex officio*)

PROFESSOR MOTT — PROFESSOR J. P. TURNER

PROFESSOR REYNOLDS — PROFESSOR COMPTON

PROFESSOR MEAD — PROFESSOR CROWNE

From the School of Technology:

PROFESSOR BASKERVILLE — PROFESSOR SKENE

From the School of Business and Civic Administration:

DEAN ROBINSON (*ex officio*)

PROFESSOR SNIDER — PROFESSOR BRETT

THE CURATOR (*ex officio*)

THE FACULTY AND INSTRUCTING STAFF

SIDNEY EDWARD MEZES, President
B.S., University of California, 1884; A.B., Harvard, 1890; A.M., 1891; Ph.D., 1893; LL.D., Southwestern University, 1911; University of California, 1912; New York University, 1915; University of Cincinnati, 1915.

HENRY PHELPS JOHNSTON, Emeritus Professor of History
B.A., Yale, 1862; M.A., 1884.

LEWIS FREEMAN MOTT, Professor of the English Language and Literature
B.S., College of the City of New York, 1883; M.S., 1886; Ph.D., Columbia, 1896.

FREDERICK DIELMAN, Emeritus Professor of Art
B.A., Calvert College, 1864; N.A., 1883.

CHARLES A. DOWNER, Professor of Romance Languages
A.B., College of the City of New York, 1886; Ph.D., Columbia, 1901; Officier d'Académie, 1906; Chevalier de la Légion d'Honneur, 1913; Cavaliere dell' Ordine della Corona d'Italia, 1920.

CHARLES BASKERVILLE, Professor of Chemistry
B.S., University of North Carolina, 1892; Ph.D., 1894; F.C.S., 1898.

JOHN ROBERT SIM, Emeritus Professor of Mathematics
A.B., College of the City of New York, 1868.

IVIN SICKELS, Professor of Geology
B.S., College of the City of New York, 1874; M.S., 1878; M.D., New York University, 1883.

THOMAS ANDREW STOREY, Professor of Hygiene
A.B., Leland Stanford Jr. University, 1896; A.M., 1900; Ph.D., 1902; M.D., Harvard, 1905.

[1]HARRY ALLEN OVERSTREET, Professor of Philosophy
A.B., University of California, 1899; B.Sc., Oxford, 1901.

[1]STEPHEN PIERCE DUGGAN, Professor of Education
B.S., College of the City of New York, 1890; M.S., 1897; A.M., Columbia, 1898; Ph.D., 1902.

WILLIAM FOX, Professor of Physics
B.S., College of the City of New York, 1884; M.E., Stevens Institute, 1886.

PAUL L. SAUREL, Professor of Mathematics
B.S., College of the City of New York, 1890; D.Sc., Bordeaux, 1900.

ERASTUS PALMER, Professor of Public Speaking
A.B., Hamilton, 1882; A.M., 1890.

[1] Absent on leave.

SAMUEL A. BALDWIN, Professor of Music
F.A.G.O., 1902.

WILLIAM GEORGE MCGUCKIN, Emeritus Professor of History
A.B., College of the City of New York, 1869; LL.B., Columbia, 1881.

LEIGH HARRISON HUNT, Professor of Art
B.S., College of the City of New York, 1877; M.S., 1880; M.D., New York University, 1880.

CARLETON L. BROWNSON, Professor of Classical Languages and Literatures
B.A., Yale, 1887; Ph.D., 1897.

HERBERT R. MOODY, Professor of Chemistry
S.B., Massachusetts Institute of Technology, 1892; A.M., Columbia, 1900; Ph.D., 1901.

CAMILLO VON KLENZE, Professor of the German Language and Literature
A.B., Harvard, 1886; Ph.D., Marburg, 1890.

FREDERICK B. ROBINSON, Professor of Economics
A.B., College of the City of New York, 1904; M.A., New York University, 1906; Ph.D., 1907.

FREDERICK G. REYNOLDS, Professor of Mathematics
B.S., College of the City of New York, 1891; LL.B., New York University, 1896; M.S., 1899; Sc.D., 1894.

DAVID F. SWENSON, Professor of Philosophy
B.S., University of Minnesota, 1898.

SAMUEL B. ARNOLD, Professor of Military Science and Tactics
Lt. Colonel, Ret., U. S. A.; United States Military Academy, 1892.

AUGUST RUPP, Associate Professor of Classical Languages
A.B., College of the City of New York, 1884.

[1]VICTOR EMMANUEL FRANÇOIS, Associate Professor of French
Candidat en philosophie et lettres, University of Brussels, 1886; A.M., University of Michigan, 1902; Ph.D., New York University, 1906; Officier d'Académie, 1908.

L. HENRY FRIEDBURG, Associate Professor of Chemistry, Emeritus
Ph.D., Göttingen, 1870.

HARRY C. KROWL, Associate Professor of English
A.B., College of the City of New York, 1895; Ph.D., New York University, 1900.

WILLIAM B. GUTHRIE, Associate Professor of Government and Sociology
B.S., Lenox, 1893; Ph.B., State University of Iowa, 1895; Ph.D., Columbia, 1905.

JOSEPH ALLEN, Associate Professor of Mathematics
A.B., Harvard, 1892; A.M., 1892.

CHARLES F. HORNE, Associate Professor of English
B.S., College of the City of New York, 1889; M.S., 1898; Ph.D., New York University, 1905.

[1] Absent on leave.

NELSON P. MEAD, Associate Professor of History
B.S., College of the City of New York, 1899; A.M., Columbia, 1903; Ph.D., 1906.

HOLLAND THOMPSON, Associate Professor of History
Ph.B., University of North Carolina, 1895; A.M., Columbia, 1900; Ph.D., 1906.

MORRIS RAPHAEL COHEN, Associate Professor of Philosophy
B.S., College of the City of New York, 1900; Ph.D., Harvard, 1906.

PAUL KLAPPER, Associate Professor of Education
A.B., College of the City of New York, 1904; M.A., New York University, 1907; Ph.D., 1909.

LIVINGSTON ROWE SCHUYLER, Associate Professor of History
A.B., College of the City of New York, 1889; S.T.B., General Theological Seminary, 1894; Ph.D., New York University, 1904.

J. SALWYN SCHAPIRO, Associate Professor of History
A.B., College of the City of New York, 1904; Ph.D., Columbia, 1909.

ALLAN P. BALL, Associate Professor of Classical Languages
B.A., Amherst, 1892; M.A., 1895; Ph.D., Columbia, 1903.

[1]MARIO EMILIO COSENZA, Associate Professor of Classical Languages
A.B., College of the City of New York, 1901; Ph.D., Columbia, 1906.

VENTURA FUENTES, Associate Professor of Spanish
A.B., College of the City of New York, 1889; M.D., Columbia, 1892.

THOMAS R. MOORE, Associate Professor of History
A.B., Wesleyan, 1897; M.A., New York University, 1905; Ph.D., 1906.

FREDERIC A. WOLL, Associate Professor of Hygiene
B.S., Teachers College, Columbia, 1910; A.M., 1911; Ph.D., New York University, 1917.

EDMUND BURKE, Associate Professor of Classical Languages
A.B., College of the City of New York, 1890.

ALEXIS I. DU PONT COLEMAN, Associate Professor of English
B.A., Oxford, 1887; M.A., 1906.

JOHN PICKETT TURNER, Associate Professor of Philosophy
A.B., Vanderbilt University, 1900; A.M., 1901; Ph.D., Columbia, 1910.

CARROLL N. BROWN, Associate Professor of Classical Languages
A.B., Harvard, 1891; A.M., 1891; Ph.D., 1900.

EARLE FENTON PALMER, Associate Professor of English
B.S., College of the City of New York, 1888; A.M., New York University, 1903; Ph. D., 1906.

RESTON STEVENSON, Associate Professor of Chemistry
A.B., University of North Carolina, 1902; A.M., 1903; Ph.D., Columbia, 1908.

GEORGE G. SCOTT, Associate Professor of Biology
A.B., Williams, 1898; A.M., 1899; Ph.D., Columbia, 1913.

[1] Relieved of duty in the College of Liberal Arts and Science; Director of the Preparatory High School.

HOMER CURTIS NEWTON, Associate Professor
B.A., University of Colorado, 1899; M.A., 1900; Ph.D., Cornell, 1902.

SAMUEL B. HECKMAN, Associate Professor of Education and Director of the Educational Clinic
Ph.B., Earlham, 1893; A.B., Harvard, 1894; A.M., University of Pennsylvania, 1905; Ph.D., 1906.

DANIEL W. REDMOND, Associate Professor of Public Speaking
Ph.B., Hamilton, 1901; Ph.D., Columbia, 1913.

ALFRED NORTON GOLDSMITH, Associate Professor of Electrical Engineering
B.S., College of the City of New York, 1907; Ph.D., Columbia, 1911.

GUY EDWARD SNIDER, Associate Professor of Foreign Trade
B.L., University of Wisconsin, 1901; M.A., University of Missouri, 1902; Ph.D., Columbia, 1907.

[1]EMORY B. LEASE, Associate Professor of Classical Languages
A.B., Ohio Wesleyan University, 1885; A.M., 1888; Ph.D., Johns Hopkins, 1894.

FREDERICK SKENE, Associate Professor of Civil and Mechanical Engineering
B.S., New York University, 1897; C.E., 1897.

LEWIS SAYRE BURCHARD, Associate Professor of Business Law
A.B., College of the City of New York, 1877; LL.B., Columbia, 1881.

FREDERICK M. PEDERSEN, Assistant Professor of Mathematics
B.S., College of the City of New York, 1889; M.S., 1893; E.E., Columbia, 1893; Sc.D., New York University, 1905.

ARTHUR BRUCKNER, Assistant Professor of Mechanical Engineering
B.S., College of the City of New York, 1892; M.E., Cornell, 1898.

ARTHUR B. TURNER, Assistant Professor of Mathematics
A.B., Johns Hopkins, 1892; Ph.D., University of Pennsylvania, 1902.

GASTON A. LAFFARGUE, Assistant Professor of French
B-ès-L. [1ère Partie], University of Rennes, 1882; Officier d'Académie, 1906; Officier de l'Instruction Publique, 1914.

FELIX WEILL, Assistant Professor of Romance Languages
B-ès-L., Paris, 1888; L-ès-L., 1892; Officier d'Académie, 1904; Officier de l'Instruction Publique, 1910.

[2]MAXIMILIAN PHILIP, Assistant Professor of Mathematics
B.S., College of the City of New York, 1898; M.S., New York University, 1903; Sc.D., 1906.

ABRAHAM J. GOLDFARB, Assistant Professor of Biology
B.S., College of the City of New York, 1900; Ph.D., Columbia, 1909.

HENRY G. KOST, Assistant Professor of German
B.S., College of the City of New York, 1880.

LIVINGSTON BURRILL MORSE, Assistant Professor of History
B.S., College of the City of New York, 1889.

EDWARD E. WHITFORD, Assistant Professor of Mathematics
A.B., Colgate, 1886; A.M., 1890; Ph.D., Columbia, 1912.

---

[1] On leave of absence from the College of Liberal Arts and Science; Instructor in the Preparatory High School.
[2] Absent on leave, except from the Evening Session.

ALFRED D. COMPTON, Assistant Professor of English
B.S., College of the City of New York, 1897.

JOSEPH VINCENT CROWNE, Assistant Professor of English
A.B., St. Joseph's College, Philadelphia, 1896; A.M., University of Pennsylvania, 1898; Ph.D., 1899.

HERBERT MILES HOLTON, Assistant Professor of Hygiene
B.S., College of the City of New York, 1899.

LOUIS J. CURTMAN, Assistant Professor of Chemistry
B.S., College of the City of New York, 1899; M.S., New York University, 1902; Ph.D., Columbia, 1907.

WILLIAM L. PRAGER, Assistant Professor of Chemistry
B.S., College of the City of New York, 1900; M.S., New York University, 1904; Ph.D., Clark University, 1908.

LYNN MATEER SAXTON, Assistant Professor of Economics
B.S., Lafayette, 1897; M.S., 1900; Pd.M., New York University, 1908; Pd.D., 1909.

JAMES ROBERT WHITE, Assistant Professor of Education
Pd.B., Normal College, Albany, N. Y., 1893; A.M., Illinois Wesleyan University, 1896; Ph.D., 1910.

ENGELBERT NEUS, Assistant Professor of Art
B.S., College of the City of New York, 1893; A.M. in Architecture, Columbia, 1904.

GEORGE C. AUTENRIETH, Assistant Professor of Art
B.S., College of the City of New York, 1902; A.M., Columbia, 1906.

WILLIAM BRADLEY OTIS, Assistant Professor of English
A.B., Iowa College, 1901; A.M., Columbia, 1904; Ph.D., New York University, 1908.

HOWARD D. MARSH, Assistant Professor of Philosophy
A.B., Ohio Wesleyan University, 1901; A.M., 1902; Ph.D., Columbia, 1905.

ROBERT W. CURTIS, Assistant Professor of Chemistry
B.S., Trinity, 1896; Ph.D., Yale, 1904.

FELIX GRENDON, Assistant Professor of English
B.S., College of the City of New York, 1900; A.M., Columbia, 1902; Ph.D., 1909.

WILLIAM L. ESTABROOKE, Assistant Professor of Chemistry
A.B., Harvard, 1901; A.M., University of New Brunswick, 1902; Ph.D., 1905.

PAUL H. LINEHAN, Assistant Professor of Mathematics
A.B., Harvard, 1902; Ph.D., Columbia, 1916.

DONALD G. WHITESIDE, Assistant Professor of English
B.S., College of the City of New York, 1897; M.A., New York University, 1900.

J. REDDING KELLY, Assistant Professor of Art

JOSEPH A. MOSHER, Assistant Professor of Public Speaking
Ph.B., Syracuse, 1905; Ph.M., 1906; A.M., Columbia, 1907; Ph.D., 1911.

GEORGE MONROE BRETT, Assistant Professor of Economics
A.B., Bowdoin, 1897.

BIRD STAIR, Assistant Professor of English
B.S., Purdue, 1899; M.S., 1901.

CHARLES A. CORCORAN, Assistant Professor of Physics
B.S., College of the City of New York, 1904; A.M., Columbia, 1906.

WILLIAM WARD BROWNE, Assistant Professor of Biology
A.B., Brown, 1908; A.M., 1909; Ph.D., 1912.

[1]HERMON CHARLES COOPER, Assistant Professor of Chemistry
Ph.B., Beloit, 1896; Ph.D., Heidelberg, 1899.

LEIGHTON B. MORSE, Assistant Professor of Physics
B.Ph., Iowa College, 1903; Ph.D., Columbia, 1908.

WALTER WILLIAMSON, Assistant Professor of Hygiene
B.A., New York University, 1906.

AMERICO ULYSSES N. CAMERA, Assistant Professor of Romance Languages
Ph.B., New York University, 1900; A.M., Columbia, 1901; Ph.D., New York University, 1912.

WARREN G. HUBERT, Assistant Professor of Mathematics
B.S., College of the City of New York, 1907; M.S., New York University, 1909; Sc.D., 1917.

FREDERIC O. X. MCLOUGHLIN, Assistant Professor of Civil Engineering
B.S., College of the City of New York, 1909; C.E., Columbia, 1913; A.M., 1914.

ROBERT F. SMITH, Assistant Professor of Mathematics
B.S., College of the City of New York, 1887; M.S., New York University, 1903.

GERARDO IMMEDIATO, Assistant Professor of Civil Engineering[2]
C.E., Columbia, 1900; M.E., 1901.

CHARLES A. HOUSTON, Assistant Professor of Business Law[2]
A.B., College of the City of New York, 1900; LL.B., New York University, 1903.

BENJAMIN PARKE DE WITT, Assistant Professor of Business Law[2]
B.A., New York University, 1909; M.A., 1912; LL.B., New York Law School, 1913; J.D., New York University, 1916.

DE WITT C. EGGLESTON, Assistant Professor of Cost Accounting[2]
M.E., Brown, 1905; C.P.A. (New York), 1908.

JOHN ALFRED BREWSTER, Assistant Professor of Mathematics
A.B., Harvard, 1896.

EARL ALBERT MARTIN, Assistant Professor of Biology
A.B., University of Missouri, 1914; A.M., 1916.

HARRIS FRANKLIN MACNEISH Assistant Professor of Mathematics
S.B., University of Chicago, 1902; S.M., 1904; Ph.D., 1909.

[1] Absent on leave.
[2] In the Evening Session.

DERBY CRANDALL, JR., — Captain, Infantry, U. S. A., Military Science and Tactics

LOUIS GOODMAN, — Lecturer on Reinforced Concrete[1]
B.S., College of the City of New York, 1901; A.M., Columbia, 1903; C.E., 1903.

MYRON A. FINKE, — Lecturer on Systems of Accounting[1]
A.B., College of the City of New York, 1906; C.P.A. (New York), 1916.

GEORGE KENT HINDS, — Lecturer on Judicial Accounting[1]
B.Ped., Ohio Northern University, 1906; M.A., 1908; LL.B., New York University, 1905; C.P.A. (New York), 1907.

WILLIAM WALKER ORR, — Lecturer on Foreign and Domestic Credit[1]
A.B., Harvard, 1896.

HOMER ADOLPH STEBBINS, — Lecturer on Business Law[1]
Ph.B., Syracuse, 1906; Ph.M., 1907; LL.B., 1908; Ph.D., Columbia, 1913; J.S.D., New York University, 1917.

WILLIAM E. COLLINS, — Lecturer on Business Law[1]
A.B., Yale, 1907; LL.B., 1910.

SAMUEL MACCLINTOCK, — Lecturer in Economics
Ph.B., University of Chicago, 1896; Ph.D., 1908.

WARREN M. MAULE, — Special Lecturer on Foreign Trade[1]

JOSEPH J. KLEIN, — Special Lecturer on Taxation[1]
B.S., College of the City of New York, 1906; Ph.D., New York University, 1910; C.P.A. (New York), 1911.

ALBERT C. BONASCHI, — Special Lecturer on Foreign Trade[1]
Doctor of Letters, Royal Scientific Literary Academy, Milan, Italy, 1893.

LAWRENCE W. ROGERS, — Special Lecturer on Salesmanship[1]

BURTIS H. COLLINS, — Special Lecturer in Economics[1]

ROSSITER HOLBROOK, — Special Lecturer on Advertising[1]
C.E., Princeton, 1906.

PIERRE ZALDARI, — Special Lecturer on Foreign Trade[1]
Bachelor of Science and Letters, Gymnasium Averoff, Alexandria, Egypt, 1895.

LEONHARD FELIX FULD, — Special Lecturer on Investments[1]
A.B., Columbia, 1903; A.M., 1904; LL.B., 1905; LL.M., 1906; Ph.D., 1909.

ROBERT GRIMSHAW, — Special Lecturer on Cost Reduction[1]
Ph.D., Andalusia, 1869.

J. GEORGE FREDERICK, — Special Lecturer on Salesmanship[1]

CARL W. KINKELDEY, — Instructor in German
A.B., College of the City of New York, 1893; M.A., New York University, 1898; Ph.D., 1906.

STANLEY SIMONDS, — Instructor in Latin, in the Preparatory High School
A.B., Harvard, 1884; Ph.D., Johns Hopkins, 1896.

[1] In the Evening Session.

BARCLAY W. BRADLEY, Instructor in Latin, in the Preparatory High School

A.B., University of Pennsylvania, 1897; Ph.D., 1900; A.M. and Dipl. in Secondary Administration, Teachers College, Columbia, 1917.

ROBERT H. HATCH, Instructor in Public Speaking

[1]HUGH S. LOWTHER, Instructor in Romance Languages, in the Preparatory High School

A.B., Syracuse, 1899; Ph.D., University of Pennsylvania, 1904.

THOMAS GAFFNEY TAAFFE, Instructor in English

A.B., Fordham, 1890; A.M., 1891; Ph.D., 1901.

GEORGE V. EDWARDS, Instructor in Latin, in the Preparatory High School

A.B., Hamilton, 1891; A.M., 1894; Ph.D., Johns Hopkins, 1899.

ALEXIS EUGENE SENFTNER, Instructor in Mathematics, in the Preparatory High School

A.B., Columbia, 1899; B.D., Union Theological Seminary, 1902; M.A., New York University, 1902; Ph.D., 1904.

KURT E. RICHTER, Instructor in German, in the Preparatory High School

Dipl. Addison Teachers' College, 1894; B.S., New York University, 1905; Pd.D., 1908.

FREDERICK W. HUTCHISON, Acting Supervisor in Art, in the Preparatory High School

CHARLES JASTROW MENDELSOHN, Instructor in Greek, in the Preparatory High School

A.B., University of Pennsylvania, 1900; Ph.D., 1904.

FRANCESCO ETTARI, Instructor in Italian, in the Preparatory High School

Licenza Liceale, University of Naples, 1881; Baccelliere in Lettere, 1883; Dottore in Lettere, 1885; Professore di Letteratura Italiana, 1886; Ph.D., Columbia, 1918.

[1]JOSEPH CUMMINGS CHASE, Supervisor in Art, in the Preparatory High School

DAVID KLEIN, Instructor in English, in the Preparatory High School

A.B., College of the City of New York, 1902; A.M., Columbia, 1904; Ph.D., New York University, 1909.

HARRY W. PECKWELL, Instructor in Art, in the Preparatory High School

PIERRE J. MARIQUE, Instructor in French, in the Preparatory High School

Professeur agrégé de l'enseignement moyen, State Board, Brussels, 1902; Pd.D., New York University, 1910; Ph.D., 1912.

WILLIAM E. KNICKERBOCKER, Instructor in French

A.B., College of the City of New York, 1904; Ph.D., Columbia, 1911.

FRANCIS L. ROUGIER, Instructor in French, in the Preparatory High School

B-ès-Sc., Paris, 1894; A.B., Fordham, 1905; M.A., New York University, 1907; Ph.D., 1911.

[1] Absent on leave.

AUSTIN BAXTER KEEP, Instructor in History
B.A., Amherst, 1897; M.A., 1901; Ph.D., Columbia, 1911.

LIONEL B. MCKENZIE, Special Instructor in Hygiene

ALFRED G. PANARONI, Instructor in Romance Languages
B.S., College of the City of New York, 1902; Elève titulaire, Ecole Pratique des Hautes Etudes, Paris, 1909.

G. PAYN QUACKENBOS, Supervisor in Latin and Greek, in the Preparatory High School
A.B., Columbia, 1900; A.M., 1901; Ph.D., 1915.

JARVIS KEILEY, Instructor in English, in the Preparatory High School
A.B., Harvard, 1899; A.M., 1900.

SAMUEL CARLETON HAIGHT, Instructor in History, in the Preparatory High School
B.S., College of the City of New York, 1892.

ALFONSO ARBIB-COSTA, Instructor in Romance Languages
Dipl., Royal Technical Institute, Rome, 1888.

ABRAM G. SCHULMAN, Instructor in Art
A.B., College of the City of New York, 1902.

ROBERT J. DAMEN, Supervisor in Romance Languages, in the Preparatory High School
Agréé de l'Académie de Paris, 1899.

RICHARD O. HEYNICH, Instructor in German, in the Preparatory High School
Dipl., Lehrer-Seminar, Osterode, Germany, 1892.

MAXIME L. BERGERON, Instructor in French
A.B., College of the City of New York, 1903; M.A., Yale, 1904; Ph.D., New York University, 1914.

JOSEPH L. TYNAN, Instructor in English, in the Preparatory High School
A.B., College of the City of New York, 1901; A.M., Columbia, 1907.

GEORGE M. HAYES, Supervisor in Mathematics in the Preparatory High School
A.B., Fordham, 1906; A.M., 1913.

RICHARD J. O'NEIL, Instructor in Hygiene

CAMILLE A. TOUISSAINT, Instructor in Mathematics, in the Preparatory High School
A.B., Columbia, 1903; A.M., 1904.

ROBERT BRUCE MACDOUGALL, Instructor in Art, in the Preparatory High School

SAMUEL A. SCHWARZ, Instructor in Mathematics, in the Preparatory High School
A.B., College of the City of New York, 1902; C.E., Columbia, 1905; A.M., 1905.

LOUIS SIGMUND FRIEDLAND, Instructor in English, in the Preparatory High School[1]
A.B., College of the City of New York, 1905; M.A., New York University, 1910; Ph.D., 1912.

[1] Also in the Evening Session of the College.

JOSEPH PEARL, Instructor in Latin, in the Preparatory High School

A.B., College of the City of New York, 1906; Ph.D., New York University, 1913.

LEON H. CANFIELD, Supervisor in History, in the Preparatory High School

A.B., Syracuse, 1908; Ph.D., Columbia, 1913.

EDGAR HALLIDAY, Instructor in Latin, in the Preparatory High School

A.B., Princeton, 1898; A.M., Columbia, 1902.

LOUIS WEINBERG, Instructor in Art, in the Preparatory High School

A.B., College of the City of New York, 1905.

ALFREDO ELÍAS, Instructor in Romance Languages, in the Preparatory High School

Bachiller en Artes, Instituto de Barcelona, 1888; Licenciado en Derecho, University of Barcelona, 1894.

WILLIAM H. HASKELL, Instructor in Art

REINHARD A. WETZEL, Supervisor in Physics, in the Preparatory High School

B.S., University of Minnesota, 1901.

WILLIAM BALLANTINE BOYD, Medical Examiner, in the Preparatory High School

B.S., College of the City of New York, 1897; M.D., Columbia, 1905.

CANUTE HANSEN, Instructor in Hygiene

D.D.S., New York College of Dentistry, 1915.

GUSTAV F. SCHULZ, Instructor in Public Speaking

B.S., College of the City of New York, 1907; A.M., Columbia, 1909.

HOWARD C. GREEN, Instructor in History, in the Preparatory High School

A.B., College of the City of New York, 1902.

[1]ARTHUR DICKSON, Instructor

B.S., College of the City of New York, 1909; A.M., Columbia, 1911.

PAUL H. REICHARDT, Instructor in Hygiene

Dipl., International Y.M.C.A. College, Springfield, Mass., 1907.

MORTON GOTTSCHALL, Instructor in History

A.B., College of the City of New York, 1913; J.D., New York University, 1917.

BERTRAM T. BUTLER, Instructor in Geology

Ph.B., Hamline, 1901; A.M., Columbia, 1908.

RADFORD J. MCCORMICK, Special Instructor in Hygiene

NATHAN HOLMAN, Special Instructor in Hygiene

Dipl., Savage School for Physical Education.

[1] Absent on leave.

ARTHUR E. ALBRECHT, Instructor in Economics
A.B., College of the City of New York, 1916; M.A., George Washington University, 1917.

ROY FISHER LEIGHTON, Instructor in Physics
Ph.B., University of Vermont, 1912; M.S., 1913; B.Ped., Syracuse, 1917.

HARRY BAUM, Instructor in Electrical Engineering[1]
B.S., College of the City of New York, 1902; E.E., Columbia, 1908.

WILLIAM ARMAND HANNIG, Instructor in Education[1]
B.S., College of the City of New York, 1905; Ph.D., New York University, 1913.

SOL BLUHM, Instructor in Education[1]
A.B., College of the City of New York, 1914; A.M., Columbia, 1915.

THOMAS P. KELLY, Instructor in Economics[1]
A.B., College of the City of New York, 1912; A.M., Columbia, 1915.

OSCAR J. SUFRIN, Instructor in Economics[1]
B.C.S., New York University, 1914; C.P.A. (New York).

MEYER PARMET, Instructor in Accountancy[1]
B.C.S., New York University, 1909; C.P.A. (New York), 1912.

ROBERT H. BROWN, Instructor in Accountancy[1]
C.P.A. (New York), 1910.

JAMES J. DONOVAN, Instructor in Accountancy[1]
C.P.A. (New Hampshire), 1918.

ALEXANDER L. PUGH, Instructor in Economics[1]
B.S. in Econ., Pennsylvania, 1899.

DAVID A. EMBURY, Instructor in Business Law[1]
A.B., Cornell, 1908; LL.B., Columbia, 1916.

JAMES E. TALLENT, Instructor in Accountancy[1]
B.S., Cooper Union, 1913; C.P.A. (New York), 1916.

FRANK E. MANDEL, Instructor in Accountancy[1]
B.S., New York University, 1911; C.E., 1914; C.P.A. (New York), 1916.

MICHAEL J. KELEHER, Instructor in English[2] in the Preparatory High School
A.B., Georgetown, 1904; A.M., St. Francis Xavier, 1906.

WILLIAM H. BURNS, Special Instructor in Accountancy[1]

ABRAHAM L. WILBERT, Special Instructor in Accountancy[1]
A.B., College of the City of New York, 1909; M.A., New York University, 1915.

WILLIAM A. PATTERSON, Special Instructor in Accountancy[1]
A.B., Columbia, 1914; A.M., 1915.

CONRAD J. SAPHIER, Special Instructor in Economics[1]
B.C.S., New York University, 1917; M.C.S., 1919.

[1] In the Evening Session.
[2] Also in the Evening Session of the College.

RAFAEL MARIN, Special Instructor in Spanish[1]
Bachelor of Arts and Sciences, Theological Seminary of Santander, Spain, 1903.

WALDO BROMLEY TRUESDELL, Instructor in Physics, in the Preparatory High School
A.B., Harvard, 1897; A.M., Columbia, 1912.

JOSEPH FRANCIS WICKHAM, Supervisor in English, in the Preparatory High School
A.B., Holy Cross, 1904; A.M., Columbia, 1908.

JOSEPH EDWARD FITZPATRICK, Instructor in English, in the Preparatory High School
A.B., Fordham, 1906; A.M., 1916.

ROBERT H. ALLES, Instructor in English, in the Preparatory High School
B.S., College of the City of New York, 1906; A. M., Columbia, 1908.

JEAN DES GARENNES, Instructor in Romance Languages, in the Preparatory High School
A.M., Georgetown University, 1896; LL.M., 1897; Officier d'Académie, 1900.

ABRAHAM YARMOLINSKY, Instructor in Russian[1]
A.B., College of the City of New York, 1916.

HERBERT RUCKES, Instructor in Biology
B.S., Cornell, 1917; A.M., 1917.

ALEXANDER MARCUS, Instructor in Physics
B.S., College of the City of New York, 1910.

JOSEPH X. HEALY, Instructor in Public Speaking
A.B., College of the City of New York, 1912; A.M., Columbia, 1918.

ARTHUR SCHUTT, Instructor in Chemistry

EGBERT M. TURNER, Instructor in Education
A.B., College of the City of New York, 1916; A.M., Columbia, 1919.

WALTER H. PEARCE, Special Instructor in Chemistry

WILLIAM ALEXANDER WHYTE, Instructor in Mathematics, in the Preparatory High School
B.S., New York University, 1911.

JOHN T. LANG, Instructor in Art, in the Preparatory High School

DEVEREUX DUER ROBINSON, Instructor in Mathematics, in the Preparatory High School
M.E., Stevens Institute, 1910.

ABRAHAM MANUEL FOX, Instructor in Economics[1]
C.E., Cornell, 1911.

CHARLES R. TAYLOR, Instructor in Accountancy[1]
B.C.S., New York University, 1913.

[1] In the Evening Session.

JOHN ROSS BURNS BYERS, Instructor in Economics
B.S., University of Pittsburgh, 1918; M.S., Columbia, 1920.

JOHN E. BROLLES, Jr., Special Instructor in Chemistry
B.S., College of the City of New York, 1918.

CHARLES C. GROVE, Instructor in Mathematics, in the Preparatory High School
A.B., Pennsylvania College of Gettysburg, 1900; A.M., 1903; Ph.D., Johns Hopkins, 1906.

ARTHUR JAMES WESTON, Instructor in Public Speaking[1]
A.B., Lehigh, 1904; M.A., Yale, 1905.

JULIUS ASHER MILLER, Psychiatrist, in the Department of Education
M.D., New York University, 1914.

CECIL BALLARD DYER, Assistant Instructor in English, in the Preparatory High School
A.B., College of the City of New York, 1912.

HERMAN ARNOLD GRAY, Assistant Instructor in History, in the Preparatory High School
A.B., College of the City of New York, 1916; A.M., Columbia, 1918.

MARK FENDERSON, Assistant Instructor in Art, in the Preparatory High School

THEODORE GOODMAN, Assistant Instructor in English in the Preparatory High School
A.B., College of the City of New York, 1915; A.M., Columbia, 1919.

BENNINGTON P. GILL, Assistant Instructor in Mathematics, in the Preparatory High School
A.B., College of the City of New York, 1917; B.S., 1917; A.M., Columbia, 1918.

ALBERT PHILIP D'ANDREA, Assistant Instructor in Art, in the Preparatory High School
A.B., College of the City of New York, 1918.

PHILIP LATHROP SMITH, Assistant Instructor in Mathematics, in the Preparatory High School
B.A., Yale, 1917.

WALTER SCOTT HEARD, Tutor in Hygiene
D.D.S., New York College of Dentistry, 1917.

JOHN JAMES DAILEY, Tutor in Hygiene

BERTON LATTIN, Tutor in Hygiene
A.B., Cornell, 1907; M.D., 1910.

[2]RAYMOND FORREST PURCELL, Tutor in Hygiene

GEORGE G. HOLZ, Dental Examiner, in the Preparatory High School
D.D.S., New York College of Dentistry, 1915.

[1] In the Evening Session.
[2] Absent on leave.

[1]Edwin T. Hauser, Tutor in Hygiene
A.B., College of the City of New York, 1916.

[2]Edward F. Walsh, Tutor in Hygiene
M.D., Fordham, 1911.

Frank W. Wheeler, Tutor in Hygiene

Oswald La Rotonda, Tutor in Hygiene
M.D., University and Bellevue Hospital Medical College, 1913.

Robert Dressler, Tutor in Physics

Max Meltsner, Tutor in Chemistry
A.B., College of the City of New York, 1906; M.S., New York University, 1911.

Jack E. Rider, Tutor in Hygiene

William B. Jones, Special Tutor in Chemistry

Arthur Richard MacCleave, Tutor in Civil Engineering and Physics
C.E., Dalhousie University, 1903.

Joseph A. Babor, Tutor in Chemistry
B.S., College of the City of New York, 1916; A.M., Columbia, 1918.

Abraham M. Goldstein, Tutor in Physics
B.S., Cooper Institute, 1916.

Thomas Evans Coulton, Tutor in Public Speaking
A.B., College of the City of New York, 1915; A.M., Columbia, 1917.

George H. Schmidt, Tutor in Hygiene
A.B., College of the City of New York, 1919.

Manuel Dávalos, Tutor in Spanish[3]
B-ès-L., B-ès-Sc., University of Ghent, 1912.

David Berk, Tutor in Accountancy[3]
B.S., College of the City of New York, 1918.

Benjamin L. Blau, Tutor in Accountancy[3]
B.S., College of the City of New York, 1918.

Benjamin Harrow, Tutor in Accountancy[3]
B.A., New York University, 1913; C.P.A. (New Hampshire), 1920.

Meyer J. Ostrow, Tutor in Accountancy[3]
C.P.A. (New York), 1916.

Ulysses S. Tasch, Tutor in Accountancy[3]
A.B., College of the City of New York, 1907; LL.B., New York University, 1912; C.P.A. (New York), 1919.

William T. Van Alstyne, Tutor in Accountancy[3]
Ph.B., Yale, 1910; LL.B., Columbia, 1913.

Louis Weinstein, Tutor in Business Law[3]
B.C.S., New York University, 1915; C.P.A. (New York), 1918.

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[1] Absent on leave.
[2] Resigned, Sept. 30, 1920.
[3] In the Evening Session.

ROBERT ALAN AMBLER, Tutor in Hygiene
A.B., King College, 1913.

SAMUEL E. CANTOR, Tutor in Hygiene
Dipl., Savage School of Physical Education.

E. R. BRAND, Tutor in Education
A.B., Columbia, 1919.

HARRY KARLIN, Tutor in Hygiene

LOUIS FREDERICK SANMAN, Medical Examiner in the Preparatory High School
B.Sc., University of Nebraska, 1914; M.D., Columbia, 1916; Graduate, Army Medical School, 1919.

SIDNEY LIEBGOLD, Special Tutor in Chemistry

HARRY H. HAAS, Tutor in Hygiene

EDWARD E. COHEN, Tutor in Chemistry
B.S., College of the City of New York, 1917.

DAVID HART, Tutor in Chemistry
B.S., College of the City of New York, 1918.

MARTIN MEYER, Tutor in Chemistry
B.S., College of the City of New York, 1918; A.M., Columbia, 1920.

ALEXANDER LEHRMAN, Tutor in Chemistry
B.S., College of the City of New York, 1918; A.M., Columbia, 1920.

WILLIAM TROYANSKY, Tutor in Romance Languages, in the Preparatory High School
A.B., College of the City of New York, 1918.

SIMON SONKIN, Tutor in Physics, in the Preparatory High School
B.S., College of the City of New York, 1920.

JACOB A. FRIEDMAN, Tutor in History, in the Preparatory High School
A.B., College of the City of New York, 1919; A.M., Columbia, 1920.

JACOB LEO PASTERNAK, Tutor in Romance Languages, in the Preparatory High School
A.B., College of the City of New York, 1919.

ELLIOT H. POLINGER, Tutor in Romance Languages, in the Preparatory High School
A.B., College of the City of New York, 1920.

ALFRED IACUZZI, Tutor in Romance Languages[1]
A.B., College of the City of New York, 1917; A.M., Columbia, 1919.

STEPHEN C. CARR, Tutor in Civil Engineering[1]
B.S., College of the City of New York, 1914.

GEORGE DARIFF, Tutor in Economics[1]
B.C.S., New York University, 1914; C.P.A. (New York), 1918.

HARRY M. SPITZENBERG, Tutor in Mechanical Engineering[1]

[1] In the Evening Session.

JOHN M. CONNOLLY, Tutor in Economics[2]
A.B., Harvard, 1917.

JOHN CASTRO, Tutor in Romance Languages, in the Preparatory High School[1]
Lyceum Diploma, Palermo, 1905.

HUBERT C. DORSEY, Tutor in Hygiene
B.Sc., University of Mississippi, 1908; M.D., Tulane, 1914.

HUGH W. ADAMS, Tutor in Economics[2]
LL.B., Columbia, 1900.

ABRAHAM Y. COWEN, Tutor in Economics[2]
AB., College of the City of New York, 1917.

JOHN HORACE MARIANO, Tutor in Economics[2]
A.B., Columbia, 1916; A.M., 1919; Ph.D., New York University, 1920.

BERNARD SOBEL, Tutor in Business English[2]
B.S., Purdue, 1910; Ph.B., University of Chicago, 1910; M.A., University of Wisconsin, 1918.

JOSEPH M. CUNNINGHAM, Tutor in Economics[2]
B.S. in Econ., University of Pennsylvania, 1917.

HENRY N. BARKER, Tutor in Economics[2]
A.B., Washington and Lee, 1914; LL.B., Columbia, 1920.

SIMON BACHRACH, Tutor in Economics[2]
A.B., College of the City of New York, 1904; LL.B., New York University, 1908; A.M., Columbia, 1909.

ALFRED L. HOFFMAN, Tutor in Accountancy[2]
A.B., College of the City of New York, 1891; LL.B., New York University, 1896.

JOSEPH LORENZ, Tutor in Government and Sociology[2]
A.B., Harvard, 1914; LL.B., 1916.

HENRY BREDEKAMP, Fellow in Physics

MOSES CHERTCOFF, Fellow in Chemistry
B.S., College of the City of New York, 1918.

BEN BAUMAN, Fellow, in the Library
B.S., College of the City of New York, 1919.

SAMUEL N. COHEN, Fellow, in the Dean's Office
A.B., College of the City of New York, 1919.

HERMAN B. WAAG, Fellow in Electrical Engineering[2]
M.E,. Cornell, 1918.

JOSEPH TULGAN, Fellow in Biology
A.B., College of the City of New York, 1920.

ALFRED NOEL APPLEBY, Fellow in Art
B.S., College of the City of New York, 1920.

GEORGE E. NELSON, Fellow, in the Library

SOLOMON LIPTZIN, Fellow, in the Library

[1] Also in the Evening Session of the College.
[2] In the Evening Session.

ARTHUR A. HEBERLEIN, — Fellow in Physics

MARK WALDO ZEMANSKY, — Fellow in Physics

MEYER LANGER, — Fellow in Physics
B.S., College of the City of New York, 1920.

ROBERT PATTERSON, — Fellow in Biology

MAURICE ISERMAN, — Fellow in Education
B.S., College of the City of New York, 1920.

WYLY MCGEHEE BILLING, — Fellow in Chemistry
B.S., Alabama Polytechnic Institute, 1916; A.M., Columbia, 1920.

FOSTER DEE SNELL, — Fellow in Chemistry
B.S., Colgate, 1919.

ALEXANDER C. GLENNIE, — Fellow in Chemistry
A.B., Columbia, 1916.

HARRY PETER COATS, — Fellow in Chemistry
B.S., Hobart, 1917; A.M., Columbia, 1918.

NATHAN H. HECHT, — Fellow in Chemistry

ALEXANDER COHEN, — Fellow in Chemistry
A.B., College of the City of New York, 1920.

DANIEL FRANCIS BROPHY, — Fellow, in the Dean's Office
B.S. in S.S., College of the City of New York, 1920.

EUGENE L. T. MULREADY, — Fellow, in the Dean's Office

DONALD MCKAY, — Fellow,[1] in the Commerce Building

GEORGE KAYSER, — Laboratory Assistant in the Preparatory High School

ADDITIONAL INSTRUCTORS IN SPECIAL COURSES

LUCIEN R. GUILBAUD, — French
B-ès-L., Lyons, 1908; B-ès-Sc., 1909.

PAUL MEUNIER-GUTTIN, — French

ARTHUR M. SUGARMAN, — In Charge of Courses in Stenography and Typewriting
A.B., College of the City of New York, 1900.

HERMAN J. STICH, — Stenography and Typewriting
A.B., College of the City of New York, 1916; C.S.R. (New York), 1916.

ROSE LICHTERMAN, — Stenography and Typewriting
B.A., Hunter, 1911.

JOHN V. WALSH, — Stenography
A.B., College of the City of New York, 1904.

ALICE J. MALOUBIER, — French Stenography

MRS. E. DE LA GARZA, — Spanish Stenography

[1] In the Evening Session.

Mrs. L. H. Hindle, — Spanish Stenography

Henry B. Arundale, — Textiles, for Salesmen

James W. Cox, Jr., — Textiles, for Salesmen
M.E., Cornell, 1909.

Bernard Baruch. — Textiles, for Salesmen
B.S., College of the City of New York, 1913; A.M., Columbia, 1919.

Simon J. Jason, — Bookkeeping
A.B., College of the City of New York, 1906; LL.B., New York University, 1909; M.A., 1914.

Arnold Levitas. — Typography
LL.B., New York Law School, 1910.

Lupescu Moritz Bernfeld, — Building Construction
C.E., Columbia, 1909.

James Henry Troy, — Automobile Mechanics

Creighton Cruse, — Automobile Mechanics
B.S., College of the City of New York, 1918.

In the Rehabilitation Courses for Disabled Soldiers

John Martin Fecher, — Machine Tool Laboratory

Harry J. Atticks, — Stationary Engineering
C.E., Lehigh, 1893.

Otto B. Arland, — Applied Electricity
E.E., Mining Institute, Freiburg, Germany, 1903.

John B. Thomas, — Building Construction
A.B., Princeton, 1888; A.M., 1891.

John H. Estabrooke, — Mechanical Drawing

Abraham N. Russoff. — Photography

Louis Wolchonok. — Mechanical Drawing
B.S., College of the City of New York, 1919.

Maxwell Henry. — Applied Electricity

Jacob London, — Mathematics
B.S., College of the City of New York, 1920.

Milton St. John Bernner, — Mechanical Drawing
M.E., Brooklyn Polytechnic Institute, 1918.

Raymond P. Smith, — Mechanical Drawing
M.E., Stevens Institute of Technology, 1915.

Anthony Yaconetti, — Common Branches
A.B., College of the City of New York, 1920.

Frank Lilienbloom, — Common Branches
B.S., College of the City of New York, 1920.

IN THE BROOKLYN BRANCH OF THE EVENING SESSION

HERBERT L. BRIDGMAN, Adviser in Journalism
B.A., Amherst, 1866. Business Manager of *The Brooklyn Standard Union.*

HANS KALTENBORN, Lecturer in Journalism
A.B., Harvard, 1909. Assistant Managing Editor of *The Brooklyn Daily Eagle.*

ADELBERT GRANT FRADENBURGH, Professor in Adelphi College, Economics and History
A.B., Allegheny, 1890; A.M., 1893; Ph.D., Wisconsin, 1894.

ERNEST NORTON HENDERSON, Professor in Adelphi College, Philosophy
Ph.B., California, 1890; A.B., 1893; A.M., 1894; Ph.D., Columbia, 1903.

JAMES WILLIAMS PARK, Professor in Adelphi College, Education and Government
B.A., Amherst, 1903; A.M., Harvard, 1915.

JOSEPH BOWDEN, Professor in Adelphi College, Mathematics
B.A., Yale, 1891; Ph.D., 1897.

WILLIAM WEST MOONEY, Professor in Adelphi College, Latin
B.A., Vanderbilt, 1899; M.A., 1904; Ph.D., Princeton, 1913.

L. LELAND LOCKE, Instructor in Mathematics
A.B., Grove City College, 1896; A.M., 1901.

CHARLES ROBERT GASTON, Instructor in English
Ph.B., Cornell, 1896; Ph.D., 1904.

ANDRÉ C. FONTAINE, Instructor in French
B-ès-L., France, 1896; A.M., Columbia, 1904.

A. MORTIMER CLARK, Instructor in English
B.S., New York University, 1910; M.A., 1912.

JOSEPH LOUIS PERRIER, Instructor in Spanish
B-ès-L., Montpellier, 1892; A.M., Columbia, 1905; Ph.D., 1909.

MARIUS CARPENTIER, Instructor in French
B.S., College of the City of New York, 1889; M.A., New York University, 1910.

JACOB CLOYD TRESSLER, Instructor in Public Speaking
A.B., Syracuse, 1906; A.M., Columbia, 1912.

ROWENA KEITH KEYES, Instructor in English
B.A., Mount Holyoke, 1902; A.M., Columbia, 1907.

HENRY W. SUYDAM, Instructor in Journalism

ARTHUR LAZARUS, Tutor in Accountancy
B.S., Columbia, 1914; M.A., 1915; LL.B., St. Lawrence, 1919; C.P.A. (New Hampshire), 1920.

ALTON J. BERNSTEIN, Tutor in Accountancy
B.S., College of the City of New York, 1917.

LOUIS PRASHKER, Tutor in Business Law
A.B., College of the City of New York, 1913; J.D., New York University, 1917.

STANDING COMMITTEES

ADMINISTRATIVE BOARD FOR THE PREPARATORY HIGH SCHOOL: Professors Cosenza, Klapper, White, Brownson, Horne, Schuyler, Woll, Kost, W. W. Browne, Bruckner, Whitford, and Camera, and Messrs. Hutchison, Wickham, Canfield, Quackenbos, Hayes, Wetzel, Damen and Bradley.

ADMISSIONS: Professors Brownson, Robinson, Skene, E. F. Palmer, C. N. Brown, Livingston Morse, Hubert, Brewster, and Heckman.

ADVISORY COMMITTEE ON COMMITTEES: Professors Saurel, Snider, and Crowne.

ATHLETICS: Professors Storey (Woll), Holton, Saxton, Linehan, and Williamson.

DISCIPLINE: Professors Brownson, Rupp, and Allen.

EMPLOYMENT: Professors Burke, Pedersen, Whiteside, and Estabrooke.

HIGH SCHOOLS: Professors Klapper, Cosenza, Fuentes, Pedersen, Weill, Prager, White, Neus, Autenrieth, Leighton Morse, Goldsmith, Burchard, Goldfarb, Curtman, and Curtis, Dr. Bradley, and, *ex officio,* the members of the Committee on Admissions.

JOINT COMMITTEE ON GENERAL AFFAIRS (Faculty Members): The President, Deans Brownson and Robinson (*ex officio*), and Professors Downer, Baskerville, and Burchard.

LIBRARY: The President, and Professors Newton (Librarian), Sickels, Thompson, and Compton.

MARSHALS: Professors Erastus Palmer, Hunt, A. B. Turner, Mosher, Woll, and Otis.

PUBLIC LECTURES: Professors Guthrie, Baldwin, Schapiro, and Stair.

STUDENT ACTIVITIES: Professors Brownson, Downer, Fox, Robinson, Moore, Coleman, Stevenson, Newton, Marsh, Grendon, Kelly, Hubert, Cohen, Burchard, Corcoran, Williamson, and Smith.

RESEARCH: Professors Baskerville, Cohen, Scott, Heckman, and Goldsmith.

THE LUNCH ROOM: Professors Guthrie, Moore, and Compton.

THE CO-OPERATIVE STORE: Professors Moore, Allen, and Brett, and Mr. Panaroni.

THE COLLEGE—ITS HISTORY, BUILDINGS AND ORGANIZATION

The College of the City of New York, originally called the Free Academy, was established in 1848 by the Board of Education of the City of New York, in pursuance of an Act of the Legislature of the state passed on May 7, 1847, and ratified by a vote of the people of the city, June 9, 1847. The first class entered in January, 1849, and completed its course in July, 1853. In the following year the Legislature empowered the institution to confer upon its graduates the usual collegiate degrees and diplomas in Arts and Science. In 1866, upon the recommendation of the Board of Education, the Legislature changed the name to *The College of the City of New York,* and conferred on the institution the powers and privileges of a college, according to the Revised Statutes of the State, rendering it subject to the provisions of the statutes relative to colleges and visitation of the Regents of the University, in like manner with other colleges of the State, and making the members of the Board of Education, *ex officio,* the Trustees of the College. In the year 1882, the Legislature repealed so much of the statutes relating to the College as had made attendance at the public schools of the city a requisite for admission, thus opening the College to all young men of the city of proper age and sufficient preparation.

In May, 1900, by amendment of the foregoing provisions, the Legislature created a separate Board of Trustees, composed of nine members, to be appointed by the Mayor, charged with the sole care and control of the College. Of this Board, the President of the Board of Education of the City of New York is, *ex officio,* an additional member. The other members serve for nine years, one being appointed each year.

Through further amendments in 1915, 1916 and 1918, the Board of Trustees was authorized by the Legislature to provide, in addition to the curricula in Liberal Arts and Science, technical and other courses, either gratuitously or otherwise, in such administrative and pedagogical divisions as the Board might create, and to confer appropriate degrees, diplomas, and certificates; to prescribe also conditions of admission and fees for any courses for non-marticulated or non-resident students; and to admit women as students, under such conditions as might be determined.

Buildings. In September, 1907, the College removed from the buildings which from its foundation it had occupied at the corner of Twenty-third Street and Lexington Avenue, to the five new buildings which the City had erected for it on Washing-

ton Heights, between One Hundred and Thirty-eighth and One Hundred and Fortieth Streets, Amsterdam Avenue and St. Nicholas Terrace. These buildings stand upon an elevation midway between the Hudson and the Harlem rivers and rise immediately above St. Nicholas Park, which lies about them to the north and east, and affords a permanently unobstructed view over a large part of the city. Their location insures not only an attractive environment and space for recreation, but also freedom from most of the noises of the city streets. The new group includes the following buildings, which were formally dedicated on May 14, 1908:

The Main Building, containing rooms for most of the departments of study, besides the Great Hall, the Library and the executive offices.

The Chemistry Building.

Compton Hall, the Engineering Building.

Townsend Harris Hall, occupied chiefly by the Preparatory School.

The Hygiene Building.

All these buildings are in the collegiate Gothic style, and are constructed of the native grey stone with white terra cotta ornament. Built around a central plaza, they form one of the city's most attractive architectural groups.

Immediately south of the Hygiene Building is the Stadium. This structure, which was erected in 1913-1915 and dedicated on May 29 of the latter year, is the gift of Mr. Adolph Lewisohn. It was planned not only to promote physical training and athletics in the College, but also for occasional public assemblies under the auspices of the City. It occupies the plot of ground bounded by One Hundred and Thirty-sixth and One Hundred and Thirty-eighth Streets and Amsterdam and Convent Avenues. The City transferred the land from the Park Department to the College, and Mr. Lewisohn's public-spirited generosity provided the great semi-elliptical seating structure in the classic style which encloses the western side, rising with the natural contour of the hill. It is built of reinforced concrete. The seating capacity is about six thousand, with standing room for fifteen hundred more. The outside dimensions are four hundred and sixty by one hundred and ninety-five feet. The athletic field contains a baseball diamond, a football field, a running track a fifth of a mile long, a four-hundred-foot straight-away course, and provision for other sports.

The Commerce Building is the original building of the College at Twenty-third Street and Lexington Avenue, designed by James Renwick in 1847, which now accommodates some of the work of the School of Business and Civic Administration. Nearly all the special and advanced professional courses in business subjects are offered in this building in the Evening Session,

because the place is convenient for persons employed by day in Manhattan and living in any of the five boroughs.

Some of the courses in the School of Business and Civic Administration, primarily for the benefit of government employees, are conducted in rooms provided for this purpose by the City in the Municipal Building, at Chambers and Centre Streets.

The Brooklyn Branch of the Evening Session of the College is at present conducted in the Boys' High School building, at the corner of Marcy and Putnam Avenues.

Organization. The College of the City of New York includes the College of Liberal Arts and Science, the School of Technology, the School of Business and Civic Administration, and the Division of Extension Courses. Both day and evening sessions are held. The College conducts, in addition, a Preparatory School, of high school grade.

College of Liberal Arts and Science. The College offers three general courses of study leading to baccalaureate degrees. These courses are designed to give a liberal and thorough collegiate training as a basis for a sound general culture, and also to permit, in the upper classes, a considerable specialization of study in the direction of a student's chosen life work.

The College of Liberal Arts and Science has no organized graduate department, though many college graduates, as special students, avail themselves of its facilities for higher work. The student, however, who plans to continue professional study in the School of Business and Civic Administration can so arrange his work that it will meet the requirements for a bachelor's degree in the College at the end of four years and make possible the master's degree in the School of Business and Civic Administration by one more year of study. Candidates for the Engineering degrees in the School of Technology may similarly, by the addition of a small number of elective courses in the College, become candidates for the degree of Bachelor of Science at the end of their fourth year of study.

For the student who contemplates professional study in schools of medicine, law, theology, or applied sciences and arts, the College furnishes the general training required by the best professional schools as prerequisite; and the opportunities which the curriculum offers for specialization may be used in many cases to shorten the later period of professional training. For all its students, the College aims at the enrichment of life through the enlargement of intellectual interests and the promotion of desirable habits of thought and action.

School of Technology. Certain courses in engineering subjects have for many years been given in the College. In 1916 the Board of Trustees authorized, in the Division of Vocational Subjects and Civic Administration, in the Evening Session, a curriculum leading to the Diploma of Junior

Civil Engineer. In 1917 the Trustees established more extensive courses in chemical, civil, electrical, and mechanical engineering which were based on the required work in the natural science curriculum of the College of Liberal Arts and Science. These Engineering Courses were organized, by vote of the Board of Trustees in June, 1919, into the School of Technology, with a separate Dean and Faculty.

The technical courses of study in this School include approximately three years of work, so that each combined curriculum of two years of collegiate required work and the technical or engineering work covers about five years. They lead to the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer, respectively.

School of Business and Civic Administration. The first course of study at the College leading to a diploma in the field of business was established as part of the Division of Vocational Subjects and Civic Administration in September, 1916. This was the curriculum leading to the Diploma of Graduate in Accountancy. In June, 1919, the Trustees of the College organized all the courses in accountancy and other courses connected with business and administrative work as a distinct School of Business and Civic Administration, with a separate Dean and Faculty.

The School is organized not only to give specific and professional training in various aspects of modern business, but also to impart a broad understanding of the inter-relation of individuals, business enterprises, and the government, as they play their parts in modern civilization. Having in mind the fact that the preparation for enlightened, efficient and patriotic service in the field of business must be as thorough as that for service in law, medicine, theology, pedagogy and applied science (and possibly even broader), the School bases its technical business instruction upon very liberal, general education. The courses of study lead to the degrees of Master of Business Administration and Bachelor of Business Administration, the professional Diploma of Graduate in Accountancy, and the Certificate of Junior Accountant. Numerous special courses to meet particular needs of people in business are also offered.

The five-year course leading to the Master's degree is made up of two distinguishable parts, the required work of any one of the courses in the College of Liberal Arts and Science, and specialized work chiefly in the junior, senior, and post-graduate years. A student who has complied with the entrance requirements of the College of Liberal Arts and Science may so arrange his course as to receive the degree of Bachelor of Arts, Bachelor of Science, or Bachelor of Science in Social Science at the end of the fourth year, and that of Master of Business Administration at the end of the fifth.

The curriculum leading to the degree of Bachelor of Business Administration is offered primarily to students who are em-

ployed during the day and who attend College at night. It includes both professional and liberal studies; its extent is one hundred and twenty semester hours. The curriculum leading to the Diploma of Graduate in Accountancy may be completed by three years of evening study and is adequate preparation for persons expecting to pass the State examination for Certified Public Accountants. A shorter professional course leads to the Certificate of Junior Accountant in private or public service.

Evening Session. The Evening Session of the College, which was established in 1909, makes it possible for young men who are otherwise employed during the day to pursue college courses at night. The professors and instructors are appointed from the regular College staff; the requirements for admission and the courses, credits, and discipline are substantially the same as those of the Day Session. Since their hours available for college work are fewer, evening students are not permitted to take so many courses each term as are taken by day students; consequently the number of years required to attain a degree is greater in the Evening than in the Day Session. It varies according to the capacity of the student.

In accordance with a resolution of the Board of Trustees adopted in December, 1917, the Evening Session of the College now admits women as students. (See page 35.)

Extension Courses. The Division of Extension Courses conducts courses of lectures in both cultural and professional subjects for teachers, librarians, and social workers. In their practical aspect, these courses are designed to qualify teachers not only for increased effectiveness in their work but also for securing higher professional licenses; librarians in the City's library system may receive credit for them in connection with their promotion examinations. Many of the courses, also, may be counted for credit toward college degrees if the candidate is qualified for admission to college and meets certain special requirements in reference to reading and examinations.

The courses are given in the hours of the late afternoon and Saturday morning. Some of them are given at the College buildings; others in various centers in the different boroughs of the City.

Preparatory High School. The Preparatory School conducted by the College affords boys of the City who have finished their elementary school course an opportunity to make their preparation for college under the direction of the College itself. The time required to complete this preparation depends upon the capacity of each student. The schedule of recitations, however, is so arranged as to permit students of more than average ability and diligence to complete the course in three years. The School occupies Townsend Harris Hall, and is used as an observation school by the Department of Education of the College.

ADMISSION

COLLEGE OF LIBERAL ARTS AND SCIENCE

For admission to the freshman class of the College a candidate must offer evidence of preparation in at least fifteen units of secondary school work. A unit means the satisfactory completion of a year's work with recitations at least four or five periods a week requiring preparation, or equivalent school work in a subject not requiring preparation.

Of these fifteen units, eleven are required to be in the following subjects, as they are described below:

English	3 units
History	1 unit
Foreign languages	5 units
Mathematics	2 units

The three units in **English** represent the amount of work in that subject usually completed in four years in a recognized preparatory school.

The requirement in foreign languages may be met by presenting any two of the following: **French, German, Greek, Latin, Spanish.** Three years of one are required and two years of another; but to conform to the curriculum leading to the degree of Bachelor of Arts three years of Latin should be presented[1] and two years of French, German, or Greek; and to conform to the curriculum leading to the degree of Bachelor of Science or Bachelor of Science in Social Science, at least one modern language.

The one unit required in **history** must include two of the following divisions of the subject, a half unit of each: (a) ancient history, (b) mediaeval and modern history, (c) English history, (d) American history and civics.

The two units required in **mathematics** are of elementary algebra and plane geometry.

The remainder of the fifteen units required for admission, in addition to the foregoing eleven, may be chosen from the following list of **elective subjects:**

Additional language, one or two years	1 or 2 units
Mathematics—	
Intermediate algebra	½ unit
Advanced algebra	½ unit
Solid geometry	½ unit
Trigonometry	½ unit

[1] For the adjustment in the case of a student admitted to the Arts curriculum with less than two years of preparatory Latin, see page 39.

History ..... ½ or 1 unit
Drawing (according to the number of hours) ..... ½ or 1 unit
Shopwork (according to the number of hours) .... ½ or 1 unit
Elementary physics ..... 1 unit
Elementary chemistry ..... 1 unit
Elementary biology ..... 1 unit
Advanced botany ..... 1 unit
Advanced zoology ..... 1 unit
Hygiene ..... ½ unit
Community civics ..... ½ unit
Physiography ..... 1 unit

It is advised that prospective candidates for the degree of Bachelor of Science should complete solid geometry, trigonometry, advanced algebra, and elementary physics while at the preparatory school and present them among the elective subjects for admission.

Admission with Conditions or Advanced Standing

A candidate who presents only fourteen or fourteen and a half units of preparation may, in the discretion of the Committee on Admission, be admitted to the freshman class, provided, however, that he must completely satisfy the entrance requirements within one year from the date of his admission, unless an extension of time be granted by the Committee on Course and Standing.

A candidate who presents the full number of entrance units and who lacks not more than two units in the list of subjects specifically required, may, in the discretion of the Committee on Admission, be admitted to the freshman class, but must completely satisfy the entrance requirements within one year from the date of his admission, unless an extension of time be granted by the Committee on Course and Standing.

Credit will be given for advanced standing in any subject, when the work so presented at admission is of equivalent college grade and is in excess of the necessary number of entrance units; but no credit can be granted at admission for any part of the work of the senior year.

Methods of Admission

Evidence of the units of preparation required for admission may be given in any of the following ways:

1. By presenting certificates from the New York City high schools or other accepted schools.

   Blank forms for this purpose may be obtained from the Committee on Admission and should be filled out by the school authorities and sent to the Committee.

2. By presenting a college entrance diploma issued by the New York State Education Department.

3. By presenting certificates of the College Entrance Examination Board.

Credentials such as are indicated above are accepted only so far as they cover specifically subjects which are given in the foregoing list of admission requirements.

4. By passing the entrance examinations of the College or the graduation examinations of its Preparatory School in Townsend Harris Hall.

Entrance examinations are held at the College in January, in June, and in September. Application for permission to take entrance examinations should be made at least two weeks in advance. The dates may be ascertained by addressing the Committee on Admission.

A candidate may take examinations in some subjects at one time and in others at other times; but he may not present himself for the entrance examinations more than four successive times, except by special consent of the Committee on Admission. The results of these entrance examinations may stand to the credit of the candidate for the period of a year and a half, but no longer.

Special Students in the Day Session

Men who are not candidates for a degree may be enrolled in the College as special students and admitted to particular courses which they desire, under the following restrictions of the privilege:

1. In the regular day session of the College, only male residents of the City of New York, twenty-one years of age or over, may be admitted as special students. In all cases the Committee on Admission reserves the right of requesting official confirmation of the student's age.

2. All candidates who desire to enter as special students must meet in full the regular requirements for admission to the freshman class of the College.

3. All candidates must give satisfactory evidence to the head of any department to whose course or courses they seek admission that they are fully equipped to pursue the work of the course or courses chosen.

4. Special students may not be enrolled for work amounting to less than five hours a week.

The Admission of Women to the Evening and Summer Sessions

Women who meet all the scholastic requirements for college entrance and are therefore qualified to matriculate as regular students of the Evening Session of the College and the Summer Session are admitted to the courses offered in those sessions on the same terms as similarly qualified male students.

The President of the College, however, has entered into an arrangement with the President of Hunter College which provides, in general, that matriculated women students who can attend the Hunter College Evening Session as conveniently as

they can attend that of the College of the City of New York must pursue at Hunter College courses available at both places, but may pursue courses offered only at the College of the City of New York if a schedule including them is approved by the Hunter authorities. Students who would clearly be inconvenienced by being required to attend Hunter College may enroll directly for work at the College of the City of New York. No Hunter College undergraduate will be admitted to a City College Summer Session without the written approval of Hunter College.

Furthermore, under this arrangement, women students who are candidates for the regular academic degrees will matriculate at Hunter College, which will confer those degrees. This arrangement, however, does not affect the conferring of technical degrees and special certificates or diplomas.

Non-matriculated Students in the Evening Session

Any mature resident of the City of New York who can profit by the work may be admitted to particular courses in the Evening Session, as a non-matriculated student, and may receive certificates of work in particular courses.

SCHOOL OF TECHNOLOGY

The admission of candidates for degrees in the School of Technology is through the prescribed portion of the curriculum leading to the degree of Bachelor of Science. The entrance requirements for such students, therefore, are the same as those of the College of Liberal Arts and Science.

SCHOOL OF BUSINESS AND CIVIC ADMINISTRATION

For the curriculum leading to the degree of **Master of Business Administration,** the methods of admission, rules and interpretations, and number of units for entrance are the same as those of the College of Liberal Arts and Science. The list of elective subjects, however (See p. 33), is enlarged to include the following:

Bookkeeping and Accounting.....½ to 1½ units
Stenography, Typewriting and Office Practice.....½ to 1 unit
One or more special commercial subjects in the group:
Commercial Law, Commercial Geography, Foreign Trade, Marketing, not to exeeed.....1½ units

To the curriculum offered in the Evening Session and leading to the degree of **Bachelor of Business Administration,** students are admitted upon meeting one of the following requirements:

(a) Completion of an approved four years high school course:

(b) Presentation of fifteen college entrance units, as follows:

English (four years course) ..... 3 units
History ..... 1 unit
Foreign Languages .....4 or 5 units

Four years of one, or three of one and two of another.

Mathematics ..... 2 units
Electives .....5 or 4 units

Note: (i) Students presenting fifteen units but lacking some required unit must carry the prescribed subjects as college work. (ii) Any of the courses in history, languages, or mathematics offered in a New York City high school are accepted. (iii) The elective group is that defined above for admission to the curriculum leading to the degree of Master of Business Administration.

For the **Diploma of Graduate in Accountancy,** a student may become a candidate either by meeting the entrance requirements for the curriculum leading to the degree of Bachelor of Business Administration or by presenting a Certified Public Accountant's qualifying certificate issued by the Regents of the University of the State of New York.

COURSES OF STUDY

The College of Liberal Arts and Science offers three curricula or courses of study leading respectively to the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Science in Social Science. The School of Technology offers, upon the basis of the required subjects in the natural science curriculum, four Engineering courses leading to the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer, respectively. The Engineering courses are somewhat longer than the regular four-year college courses in Arts and Science; they require usually about five years for completion. The School of Business and Civic Administration offers, upon the basis of the prescribed work in any one of the curricula in Liberal Arts and Science, a five-year curriculum leading to the degree of Master of Business Administration. This School also offers, in the Evening Session, a curriculum of one hundred and twenty semester hours leading to the degree of Bachelor of Business Administration, and a shorter professional curriculum leading to the Diploma of Graduate in Accountancy.

COLLEGE OF LIBERAL ARTS AND SCIENCE

The three curricula in Arts and Science which are offered by the College are designed to meet the requirements of liberal education. They are also planned to afford the student in the upper college years an opportunity to follow a well-defined group of subjects leading toward a definitely chosen life-work, to furnish him, in some departments, with special professional training, and to extend his culture in the direction of his personal intellectual interests.

With these ends in view, the four-year curricula have been divided into two nearly equal parts, the earlier portion consisting mainly of prescribed work and the later portion consisting mainly of elective work. It is expected that the candidate for a degree will complete the prescribed work before taking up elective courses, except four credits of work in the department of Public Speaking, which are regularly to be taken in the last two years.

The total number of credits required for graduation is one hundred and thirty-four, a little more than half of which are for prescribed work. A credit is defined as normally representing work that calls for two and a half hours per week per term of a student's time in prescribed courses, or three hours in elective courses.

PRESCRIBED WORK

The prescribed work in the curriculum leading to the degree of **Bachelor of Arts** includes the following courses:

Biology 1	4	credits
Chemistry 1 and 2	6	"
Economics 1	3	"
English 1, 2, and 3	6	"
Government and Sociology 1	3	"
History 1 and 2	7	"
Hygiene 1, 2, 3, and 4	4	"
Latin 1, 2, 3, and 4	14	"
A second language (Greek, French, or German, 1-4)	14	"

These requirements are based upon the assumption that the student has presented three units of preparation in Latin at entrance to College. A student, however, who is admitted to the Arts course with less than two units of Latin will be required to complete in College only three years of Latin, including both preparatory and college work, five hours a week through two years (see p. 84) and four hours a week through a third year; but if the total amount of work in Latin thus completed shall fall short of four years the amount of such shortage shall be added to the normal requirement in the second language. The second language should be one of the languages presented for admission.

A third language, courses 41 and 42, or Comparative Literature and Art (English 41 and 42)	6	credits
Mathematics 2 (*Trigonometry) and either 3 (*Advanced Algebra) or 41	6	"

*If not presented for admission.

Military Science 1, 2, 3, and 4, or 1, 2, 5, and 6	4	"
Philosophy 1	3	"
Physics 1 and 2	6	"

If not presented for admission.

Public Speaking 1-8	8	"

The prescribed work in the curriculum leading to the degree of **Bachelor of Science** is as follows:

Art 1-2	4	credits
Biology 1	4	"
Chemistry 1, 2, and 3	9	"
Economics 1	3	"
English 1, 2, and 3	6	"
French 1 and 2, or 2 and 3, or German 1 and 2, 7 and 8, or 3 and 4, or Spanish 1 and 2, or 3 and 4	7	"

The language chosen should be one of those presented for admission.

Geology 1	3	credits
Government and Sociology 1	3	"
History 1 and 2	7	"
Hygiene 1, 2, 3, and 4	4	"
Mathematics 1 (*Solid Geometry), 2 (*Trigonometry), and 3 (*Advanced Algebra)	9	"
and 4 and 5	10	"

*If not presented for admission.

Military Science 1, 2, 3, and 4, or 1, 2, 5, and 6	4	"
Philosophy 1	3	"
Physics 3, 4, 5, and 6	6	"

If one unit of elementary physics has been presented for admission. If not, the college requirement includes also Physics 1 and 2.

Public Speaking 1-8	8	"

The prescribed work in the curriculum leading to the degree of **Bachelor of Science in Social Science** is as follows:

Biology 1	4	credits
Chemistry 1 and 2	6	"
Economics 1 and 2	6	"
English 1, 2, and 3	6	"
French 1 and 2, or 2 and 3, or German 1 and 2, or 3 and 4, or Spanish 1 and 2, or 3 and 4	7	"

The language chosen should be one of those presented for admission.

Government and Sociology 1 and 5	6	"
History 1, 2, 3, and 4	12	"
Hygiene 1, 2, 3, and 4	4	"
Mathematics 6 (*Solid Geometry and *Trigonometry)	4	"
and 7	4	"

*If not presented for admission.

Military Science 1, 2, 3, and 4, or 1, 2, 5, and 6	4	"
Philosophy 1, 2 or 3, and 5	9	"
Physics 3 and 4	4	"

If one unit of elementary physics has been presented for admission. If not, the college requirement includes also Physics 1 and 2.

Public Speaking 1-8	8	"

The amount of prescribed work in the foregoing lists may be diminished in the case of students who present more than the required number of units for admission, if the excess represents work of college grade accepted for advanced standing in the required subjects.

ADDITIONAL COURSES AVAILABLE FOR ELECTION

After this Register went to press, the Board of Trustees broadened the field of election by adding to the elective program of students in the College of Liberal Arts and Science all the courses that are offered for credit in the School of Technology and in the School of Business and Civic Administration. Besides enriching the elective program for candidates for any one of the liberal degrees, this ruling will enable:-

1 - A Science student to begin one of the technical programs early (counting the courses as liberal electives and also as technical prescriptions) so that at the end of the fourth year such a student may obtain his B. S. degree, and at the end of the fifth year, one of the technical degrees granted by the School of Technology.

2 - A student in Arts, Science or Social Science to begin a program of studies in the School of Business early (counting the courses as electives toward a baccalaureate degree and also as prescriptions for the Master's degree) so that such a student may obtain his A.B. his B. S., or his B. S. in S. S. degree at the end of four years, and his degree of Master of Business Administration at the end of the fifth year.

Credit given in English and in Public Speaking is subject to the following regulation, in accordance with which one-half credit is reserved in each of these departments until graduation:

> The head of any department of the College who finds a student deficient in written or spoken English is required to report that fact to the Head of the Department of English Language and Literature or to the Head of the Department of Public Speaking, as the case may require, and the student so reported shall be required to submit to such tests and to such subjects or courses of study as shall satisfy the head of the department to whom the report has been made and the head of the department who shall have reported the deficiency, that the same has been removed.

Military Science and Tactics

A unit of the Reserve Officers' Training Corps has been established at the College, and the War Department has detailed a commissioned officer of the United States Army to serve as Professor of Military Science and Tactics. Military Training is prescribed for all able-bodied students through the first four terms of their attendance at the College.

ELECTIVE WORK

The remaining credits required for a liberal degree, in addition to those particularly prescribed, are elective, under restrictions which oblige a certain concentration but which permit beyond that either a wide distribution or further specialization, as the individual student may choose. For these purposes, the college departments, with two exceptions, have been grouped in three Divisions, as follows:

The Division of Language and Literature, including Art, Classical Languages, English, German, Public Speaking, and Romance Languages.

Chairman, Professor Crowne
Secretary, Professor Redmond

The Division of Social Science, including Economics, Government and Sociology, History, and Philosophy.

Chairman, Professor Guthrie
Secretary, Professor Saxton

The Division of Natural Science, including Art (for the work in descriptive geometry and mechanical drawing), Biology, Chemistry, Engineering, Geology, Hygiene, Mathematics, and Physics.

Chairman, Professor Sickels
Secretary, Professor Reynolds

At the end of the sophomore year each student is asked to declare in which of these divisions he desires to pursue his major work for the remainder of his college course. In the division

chosen he will be required to take at least one-half of his elective credits and at least twelve credits of this number in one department of the division so selected. The other half of the elective credits may be taken in any department or departments of the College, including with those named in the above divisions the departments of Education and Music.

Students are recommended to consult with the chairmen of the divisions and with the heads of departments when about to make their elections. It cannot be too strongly urged that when, at the end of the sophomore year, a student begins to make his elections, he should plan not merely for the first junior term but also for all the terms before him until graduation. The student who, as the result of his high school preparation and the prescribed work of the first two college years, comes to the choice of his elective work with a full consciousness of his capacities and limitations, should be able to decide as to the general direction of his future study. If he has definitely decided upon his particular life work, a judicious choice of elective courses, covering the period of the last two years in college, may be made to assist him very much in preparing himself for it, while increasing the satisfaction of his own intellectual aptitudes. Such a choice may also be directed to the shortening of the required period of attendance in professional and other post-graduate schools.

"Pre-Medical Course"

Students desiring to enter a medical school with the minimum of preparation are required at present to complete two years of college work, including one and one-half years of Chemistry (Inorganic and Organic) and one year each of Physics, Biology and English. These conditions may be met satisfactorily by students pursuing the regularly prescribed subjects of the Science curriculum (page 39), who in addition are permitted to elect one course in Biology (either 22 or 23) and two courses in Chemistry (4 and 50). The privilege of electing these courses in Biology and Chemistry is known as the "pre-medical privilege," and is extended to those students only who maintain an average grade of C throughout each term.

Additional courses in biology, chemistry and hygiene may be taken only in the junior and senior years. Students are strongly urged, therefore, if they desire to obtain an adequate preparation for the study of medicine, to take the full college course.

SCHOOL OF TECHNOLOGY

The four courses of study which are offered in Chemical, Civil, Electrical, and Mechanical Engineering all include as substantially their first two years of work the courses prescribed

for the degree of Bachelor of Science in the College of Liberal Arts and Science.

This prescribed work is largely cultural in character; the purpose in making it fundamental to an engineering course is to secure in the education of the engineer a broader range of mental vision than restriction to wholly technical subjects can procure. More time is required for the completion of these engineering courses than for the completion of the liberal college course; upon the satisfactory completion of them the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer, respectively, are conferred.

A student entering the freshman class pursues the same subjects as though he desired only the bachelor's degree in Science, and does not need to decide whether he wishes to pursue engineering until the end of his freshman year; not until the end of his sophomore year does he need to make a final selection of one of the various branches of engineering. He thus has the opportunity to discover his special aptitude and come to a decision after two years of college work, during which he has been laying a broad foundation for later engineering, scientific, or technical pursuits. Should he find that his abilities are greater in some other direction than in engineering, the college curriculum provides him the opportunity to elect a group of subjects fitted to his needs without any sacrifice of the time already spent.

Some of the elective subjects required in these Engineering Courses may be counted toward the liberal degree of Bachelor of Science; others, because of their special technical character, may be counted only toward the degrees in Engineering. Most of these courses are subject to the instructional fee of $2.50 for each weekly attendance hour.

The length of time required to complete one of the Engineering Courses depends upon the capacity of the individual student. The amount of work which he will be permitted to include in his schedules each term will depend upon his accomplishment the preceding term. In preparing his schedule he should consult with the heads of the departments in which his courses lie; and in any case he should plan his schedule of courses from the beginning with due regard to the order of prerequisites. At the normal rate of sixteen credits a term, the Engineering Courses require about five years to complete, with the addition, in the case of the curriculum in Civil Engineering, of the two summer camps in surveying.

The subjects prescribed for all candidates for the Science degree, which are included in each of the Engineering Courses, amount to 81 credits, for those who have presented four units of mathematics and one of physics for admission to College. (See page 39.)

The Curriculum in Chemical Engineering

In addition to the subjects prescribed for all Science students the course of study in Chemical Engineering includes the following courses in the several departments indicated:

Art: 112, Mechanical Drawing; 201, Advanced Mechanical Drawing and Elementary Machine Design.

Biology: 41, General Bacteriology.

Chemistry: 4, Quantitative Analysis; 20, Physical Chemistry; 70, Electro-Chemistry; 50, Organic Chemistry I; 55, Organic Chemistry II; 33, Advanced Qualitative Analysis; 44, Advanced Quantitative Analysis; 111, Advanced Inorganic Chemistry; 260, Applied Inorganic Chemistry; 261, Practice in Applied Inorganic Chemistry; 265, Applied Organic Chemistry; 266, Practice in Applied Organic Chemistry; 146, Municipal Chemistry; 249, Potable and Industrial Water; 159, Food Inspection and Analysis; 280, Ferriferous Metals; 281, Practice in the Chemistry of Ferriferous Metals; 246, Technology of Fuel and Gas; 269, Chemistry of Commerce; 100, Research.

Engineering: C. E. 110, Materials of Construction; E. E. 120, Elementary Electrical Engineering; M. E. 122, Power.

Geology: 12, Mineralogy.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 12, Advanced Mechanics.

Economics: 150, Business Organization.

These courses count in the aggregate 84 credits, which, added to the 81 credits prescribed for all Science students, make a total of 165 credits required for the degree of Chemical Engineer.

The Curriculum in Civil Engineering

In addition to the subjects prescribed for all Science students the course of study in Civil Engineering includes the following courses in the several departments indicated:

Art: 113, Topographical Drawing; 213, Structural Drafting.

Biology: 41, General Bacteriology.

Chemistry: 262, Industrial Chemistry.

Engineering: C. E. 101, Theory of Surveying; C. E. 202, Practical Surveying, with First Summer Camp; C. E. 203, Practical Surveying, Second Summer Camp; C. E. 110, Materials of Construction; C. E. 111, Mechanics of Materials; C. E. 120, Hydraulics; C. E. 221, Hydraulics Laboratory; C. E. 222, Materials Laboratory; C. E. 223, Graphics; C. E. 224, Pavements; C. E. 225, Masonry; C. E. 226, Railroads I; C. E. 232, Bridges I; C. E. 233, Framed Structures; C. E. 235, Foundations; C. E. 236, Railroads II; C. E. 242, Bridges II; C. E. 243, Water Supply and Sewers; C. E. 244, Tunneling and Excavating; C. E. 245, Reinforced Concrete; E. E. 120, Elementary Electrical Engineering; M. E. 122, Power.

Geology: 12, Mineralogy.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 12, Advanced Mechanics.

Economics: 150, Business Organization.

These courses count in the aggregate 90 credits, which, added to the 81 credits prescribed for all Science students, make a total of 171 credits required for the degree of Civil Engineer.

The Curriculum in Electrical Engineering

In addition to the subjects prescribed for all Science students the course of study in Electrical Engineering includes the following courses in the several departments indicated:

Art: 112, Mechanical Drawing; 201, Advanced Mechanical Drawing and Elementary Machine Design.

Chemistry: 262, Industrial Chemistry.

Engineering: C. E. 101, Theory of Surveying; C. E. 110, Materials of Construction; C. E. 111, Mechanics of Materials; C. E. 120, Hydraulics; C. E. 221, Hydraulics Laboratory; C. E. 223, Graphics; E. E. 120, Elementary Electrical Engineering; E. E. 122, Electrical Measurements; E. E. 124, Alternating Currents; E. E. 230, D. C. Machinery; E. E. 232, Industrial Applications; E. E. 233, Illumination; either E. E. 234, Design, and E. E. 235, Telegraph and Telephone, or E. E. 126, Radio Engineering I; E. E. 237, Power Plants; E. E. 240, A. C. Machinery; E. E. 242, Distribution and Transmission; either E. E. 243, Electric Railroads, and E. E. 244, Design, or E. E. 146, Radio Engineering II; M. E. 210, Forge and Foundry; M. E. 211, Mechanical Instrument Laboratory; M. E. 220, Pattern Making; M. E. 122, Power; M. E. 230, Machine Tools.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 11, Advanced Electricity; 12, Advanced Mechanics.

Economics: 150, Business Organization.

These courses count in the aggregate 81 credits, which, added to the 81 credits prescribed for all Science students, make a total of 162 credits required for the degree of Electrical Engineer.

The Curriculum in Mechanical Engineering

In addition to the subjects prescribed for all Science students the course of study in Mechanical Engineering includes the following courses in the several departments indicated:

Art: 112, Mechanical Drawing; 201, Advanced Mechanical Drawing and Elementary Machine Design.

Chemistry: 262, Industrial Chemistry.

Engineering: C. E. 101, Theory of Surveying; C. E. 110, Materials of Construction; C. E. 111, Mechanics of Materials; C. E. 120, Hydraulics; C. E. 221, Hydraulics Laboratory; C. E. 223, Graphics; E. E. 120, Elementary Electrical Engineering; M. E. 210, Forge and Foundry; M. E. 211, Mechanical Instrument Laboratory; M. E. 220, Pattern Making; M. E. 221, Steam Power; M. E. 124, Kinematics; M. E. 230, Machine Tools; M. E. 231, Steam Power Laboratory; M. E. 232, Water Power; M. E. 233, Water Power Laboratory; M. E. 234, Machine Design I; M. E. 235, Heat and Ventilation; M. E. 240, Shop Processes; M. E. 241, Power Plants; M. E. 242, Gas Power; M. E. 243, Gas Power Laboratory; M. E. 244, Machine Design II.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 12, Advanced Mechanics; 13, Heat (Advanced).

Economics: 150, Business Organization.

These courses in the aggregate count 77 credits, which, added to the 81 credits prescribed for all Science students, make a total of 158 credits required for the degree of Mechanical Engineer.

SCHOOL OF BUSINESS AND CIVIC ADMINISTRATION

The purpose of this school is to fit men to carry on business, public and private. The principle is recognized that private business is public service in a broad sense and public administration cannot be unmindful of the needs of private business. The two are interrelated and on the technical side they depend on similar devices and methods for their effectiveness. It is furthermore recognized that leaders in either field must be men of broad training.

The School offers four curricula ranging from the most thorough and broad course for the degree of Master of Business Administration, to the more narrow and technical course leading to the Certificate of Junior Accountant. The entrance requirements and prescribed courses are different in the various curricula. Students not candidates for any degree, diploma or general certificate may pursue special or individual courses and receive individual certificates for satisfactory work.

REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

A.—Fundamental Prescription

Any one of the following prescribed groups of undergraduate studies:

	Arts	Science	Social Science
Biology	4 credits	4 credits	4 credits
Chemistry	6 "	9 "	6 "
Economics	3 "	3 "	6 "
English	6 "	6 "	6 "
Government and Sociology	3 "	3 "	6 "
History	7 "	7 "	12 "
Hygiene	4 "	4 "	4 "
Military Science	4 "	4 "	4 "
Philosophy	3 "	3 "	9 "
Public Speaking	8 "	8 "	8 "
Latin	14 "		
Second Language	14 "	7 "	7 "
Third Language or Comparative Literature	6 "		
Mathematics	..	10 "	4 "
Physics	..	6 "	4 "
Drawing (Art 1-2)	..	4 "	
Geology	..	3 "	
	82 "	81 "	80 "

B.—Added General Requirement

These courses are required for the M. B. A. degree and they may be counted toward the fulfilment of the elective requirements for any one of the baccalaureate degrees of the College.

Economics 2—Evolution of Industry	3 credits
Economics 12—Resources of the United States	3 "
History 3—Contemporary European History	3 "
History 4—Contemporary United States History	2 "
Economics 271—Market Geography	2 "
Philosophy 5—General Psychology	3 "
Government and Sociology 5—Elements of Sociology	3 "
Economics 20—Money and Banking	3 "
Economics 150—Business Organization	3 "
Economics 130-131—Accounting, first year	6 "
Economics 230-231—Accounting, second year	6 "
Economics 190—Business Law, first term	3 "
Economics 191—Business Law, second term	3 "
	43 credits

C.—Group Specialization

One of the following specialized groups of study must be pursued:

GROUP I

General Business Management

Economics 232—Cost Accounting	2 credits
Economics 250—Business Management	3 "
Economics 220—Business Finance	2 "
Economics 11—Problems of Political Economy	3 "
Economics 13—Labor Problems	3 "
Economics 155—Advertising	3 "
Economics 156—Marketing	3 "
Economics 192—Business Law (3d Term)	3 "
Philosophy 54—Psychology of the Volitional Processes, or Special course in Income Tax or Business	3 or 2 "
Thesis	4 "
	29 or 28 credits

GROUP II

Public Service

Government and Sociology 11—American Constitutional Law	3 credits
Government and Sociology 14—Comparative Government	3 "
Government and Sociology 15—State Legislation	3 "
Government and Sociology 23—Municipal Administration	3 "
Economics 232—Cost Accounting	2 "
Economics 240—Public Utilities	2 "
Economics 235—Municipal Accounting	2 "
Government and Sociology 16—Administrative Law in the United States	3 "
Government and Sociology 25—Public and Municipal Finance, or History 36—Development of the State and City of New York—or other courses in Government	3 "
Thesis	4 "
	28 credits

GROUP III

Foreign Trade and Consular Service

Economics 175—Business Methods in Foreign Trade (Marketing)	3 credits
Economics 176—Business Methods in Foreign Trade (Ocean Trade and Traffic)	3 "
Economics 173—South American Markets, or other special Market Course	3 "
Government and Sociology 12—International Law	3 "
History 39—Development of South American States	3 "
Economics 70—Foreign Exchange and Financing Foreign Trade	3 "
Economics 222 and 272—Domestic and Foreign Credit	4 "
Thesis	4 "
	26 "

GROUP IV

Accounting

Economics 232-233—Cost Accounting	4 credits
Economics 237-238—Auditing	4 "
Economics 243-244—Advanced C. P. A. Problems	4 "
Economics 242—Judicial Accounting	2 "
Economics 192—Business Law (3d Term)	3 "
Government and Sociology 57—Statistics	3 "
Thesis	4 "
	24 "

Summary of Requirements for the M. B. A. Degree

Entrance Units 15

	Arts	Science	Social Science
Fundamental, prescribed college credits	82	81	80
Added general requirement	43	43	29
Group election (average)	26	26	26
Free election (average)	9	10	25
Total credits for M. B. A. Degree	160	160	160

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

The course of study leading to this degree is offered in the Evening Session primarily to meet the needs of persons employed during the day. It comprises 120 semester hours, assigned as follows:

Prescribed Courses

English 201, Business Composition	2 hours
English 202, Advanced Business Writing	2 "
English Literature (a course selected from the electives of the English Department)	2 "

Public Speaking, 1, 5, 6, and 7	4	hours
A Modern Language	6	"
This requirement is based upon the assumption that the student has presented two units of a modern language for entrance. (See p. 37.) Otherwise, he must take enough courses in the modern language chosen to make a total of at least three years' study of it.		
*Science (Biology 1 or Chemistry 1-2 or Physics 1-2)	4 or 6	"
*If not presented for entrance.		
History 3, Contemporary European History	3	"
History 4, the United States Since 1876, or History 34, Contemporary American Problems	2 or 3	"
Mathematics 120, Mathematical Theory of Investment	2	"
Economics 1, Elements of Economics	3	"
Economics 2, Evolution of Industry	3	"
Economics 12, Resources and Industries of the United States	3	"
Economics 20, Money and Banking	3	"
Economics 150, Business Organization	3	"
Economics 130-131 and 230-231, Accounting I and II	16	"
Economics 232, Cost Accounting	2	"
Economics 190, 191, 192, Business Law	9	"
Philosophy 5, Psychology	3	"
Government and Sociology 1, American Government and Citizenship	3	"
	75-78	"

Elective Courses

One of the following elective groups (described on pp. 47, 48) must be taken, and in addition enough free electives to make up the total requirements—120 credits:

Group I—General Business
Group II—Public Service
Group III—Foreign Trade and Consular Service
Group IV—Accounting
(Others to be added)

Credit in Addition to Credits Earned by Classroom Attendance

Students in the Evening Session of the School of Business and Civic Administration will not receive additional credits because of grades earned in courses pursued in class. But, on the other hand, any student who has obtained 50 per cent. of the total credits required for graduation, with the grade of D, must earn all other credits with a grade of C or better. All students who are to receive a degree in this School must have had successful business experience. Such experience is regarded as laboratory work related to the instruction in the class room. There is only one real laboratory of business, and that is the business office itself. Therefore, all students must earn at least six credits toward the degree by actual business experience; and others with wider experience may earn up to, but not exceeding twenty-four credits. The exact number of such credits that may be counted

toward a degree will depend largely upon the excellence of the student's class room work.

The Committee on Course and Standing will pass upon the nature and scope of the business experience for which credit is to be awarded. In general, it must be in some position demanding initiative and judgment. Credit will not be given for mere routine service in a commercial house.

REQUIREMENTS FOR THE DIPLOMA OF GRADUATE IN ACCOUNTANCY

Prescribed Courses

The courses marked with an asterisk in the table below:

Economics 130-131—First Year, Accounting, Theory, Practice, and Problems	†*128	hours
Economics 230-231—Second Year, Accounting, Theory, Practice, and Problems	†*128	"
Economics 232—Cost Accounting	*32	"
Economics 234—Municipal Accounting, Departmental	†32	"
Economics 235—Municipal Accounting, General	†32	"
Economics 237—Auditing	*32	"
Economics 240—Public Utilities Accounting and Statistics	*32	"
Economics 242—Judicial Accounting	*32	"
Economics 243-244—Advanced Accounting Theory and Problems	*64	"
Economics 190—First Term, Business Law	*48	"
Economics 191—Second Term, Business Law	*48	"
Economics 192—Third Term, Business Law	*48	"
Economics 1—Elements of Economics	†*48	"
Economics 2—Evolution of Industry	*48	"
Economics 20—Money and Banking	*48	"
English 201-202—Elements of Business Writing	†*64	"
Public Speaking 1—Vocal Expression	†*64	"
Public Speaking 5-6—Debate	†*32	"
Public Speaking 7—Extemporaneous Speaking	†*16	"

Elective Courses

In addition to the courses marked *, the student must elect enough other courses in the School of Business or in the Departments of Economics and Government of the Evening Session to make a total of not less than 1,000 hours of study.

REQUIREMENTS FOR THE CERTIFICATE OF JUNIOR ACCOUNTANT

The 496 hours with the † in the above table, and one course in Government, Evening Session. Students preparing for positions as Junior Accountants in general practice rather than public service may substitute Cost Accounting and Auditing in place of the two courses in Municipal Accounting.

THE LIBRARY

The Library of the College is at present located on two floors in the apse of the Main Building. The reference and reading room occupies the main floor, and the stacks and loan desk the floor below. The reference department is open to all. Books may be borrowed by persons connected with the College in any way now or in the past, and by outsiders properly introduced under the rules of the Library Committee.

The Library contains over seventy thousand bound volumes and forty thousand pamphlets. Most of these books are to be found in the main collection, though there are considerable department libraries. The Library is a depository for all publications of the United States Government, and receives each year about 250 bound volumes and numerous pamphlets from this source.

The books in the main library and the departmental collections have been purchased largely with the income from the Trust Funds which are described on the following page.

In 1909, by the generous donation of Mr. John Claflin, of the class of 1869, the collection of the late Professor Simon Newcomb, of Washington, D. C., was purchased for the Library, and was catalogued at the donor's expense. About four thousand volumes and two thousand pamphlets, principally in the mathematical and astronomical sciences, are contained in the Newcomb Library.

Mr. Jacob H. Schiff, by a gift of $2,000 in 1910, provided for the purchase of books for the collection in the Department of History. Mr. Adolph Lewisohn in 1910, and again in 1913, made a donation of $1,000, for a library in the Department of German. The Class of 1885, on the occasion of the twenty-fifth anniversary of graduation, resolved upon a gift for the College, and the following year gave to the Department of Romance Languages about a thousand volumes in French and established a fund which enables the department to purchase forty or fifty volumes a year. The department of English received in 1912 from Mr. Bernard M. Baruch, of the class of 1889, a gift of $500 for its library, which had previously possessed a small collection of books, chiefly the gift of Mr. Ernest N. Perrin, of the class of 1879.

Among recent gifts to the College Library have been the law library—one thousand volumes—of the late John Mason Knox, of the class of 1868, and the sum of $260 from the Trus-

tees of the Hugh Carlisle Memorial Fund. This gift, which was the residue of that fund, has been expended for books of unusual value that are kept as a special collection in the Reference Room of the Library.

TRUST FUNDS FOR LIBRARY PURPOSES

THE HOLBROOK LIBRARY FUND

In 1852, a clause of the will of Ephraim Holbrook bequeathed to the Board of Education of the City of New York the sum of $5,000, the interest to be applied to the purchase of books for the library of the Free Academy, now the College of the City of New York.

Trustees: The Board of Education.

THE GROSVENOR LIBRARY FUND

In 1856, a clause of the will of Seth Grosvenor bequeathed to the Board of Education of New York the sum of $30,000 and provided that the income thereof should be expended in purchasing books to form a library for the Free Academy. The fund now amounts to $32,000.

Trustees: The Board of Education.

THE STEERS BOOK FUND

In 1907, James R. Steers, of the class of 1853, gave a fund of $10,000, the interest on which is to be applied to the purchase of such scientific books as the President of the College may direct, for the use of members of the instructional staff and the students and such other persons as the President may designate. Books are at present purchased from this fund for the departments of Chemistry, Biology, Engineering, Geology, Hygiene, and Physics.

Trustees: The Board of Trustees of the College.

THE GIBBS-STEERS FUND

In 1911, Mr. Steers established a fund of $5,000, the interest on which is to be applied to the purchase of books for the Wolcott Gibbs Library of Chemistry.

Trustees: The President of the College, the Professor of Chemistry, and the Chairman of the Board of Trustees.

THE CLASS OF 1885 FUND

In 1911, the Class of 1885, by a gift of $2,000, provided a fund the income from which is to be used for the purchase of books for the Department of Romance Languages.

Trustees: Dr. George B. McAuliffe, Dr. Samuel M. Landesman, and Mr. Louis P. Bach.

THE WARBURG FUND

In 1912, Felix M. Warburg, by a gift of $2,500, provided a fund the income from which is to be used for the purchase of periodicals for the departments of Biology, Geology, and Hygiene.

Trustees: The Board of Trustees of the College.

THE LIBERTY LOAN TRUST FUND

In the fall term of 1917, the students and teachers of the College and Preparatory School contributed the sum of $3,050 for the purchase

of United States bonds of the Second Liberty Loan. These bonds were presented to the College Library and that of Townsend Harris Hall, the income to be employed for their benefit in such manner as the trustees of the fund may authorize.

Trustees: The Chairman of the Board of Trustees of the College, the President of the College, and the Librarian.

THE TOWNSEND HARRIS HALL LIBRARY FUND

In the spring term of 1920, the students of the Preparatory High School presented a fund of $3,335.85, chiefly invested in United States bonds of the Third, Fourth, and Fifth (Victory) Liberty Loans, the income of which is devoted to the needs of the Library of Townsend Harris Hall.

Trustees: The Chairman of the Board of Trustees of the College, the President of the College, and the Director of the Preparatory High School.

THE BULLOWA MEMORIAL FUND

In 1920, the College Library received a $500 bond, presented by Jesse G. M. Bullowa, of the class of 1899, Ralph J. M. Bullowa, of the class of 1901, and Emilie M. Bullowa, LL.B., in memory of their brother, the late Ferdinand Ezra M. Bullowa, of the class of 1892.

THE CLASS OF 1872 LECTURE FUND

In 1914, the Class of 1872, in commemoration of the fortieth anniversary of their graduation, gave to the Trustees of the College the sum of twelve thousand dollars ($12,000), face value, in the three and one-half (3½%) per cent. bonds of the City of New York. The income from this fund is devoted annually to securing a course of lectures on subjects to be selected by the Board of Trustees.

THE CLASS OF 1870 FUND

In 1920, the Class of 1870 made to the College a gift of securities for the purpose of equipping courses in Economic Geography.

Trustees: The President of the College, the Professor of Geology, and the Professor of Economics.

PRIZES AND SCHOLARSHIPS

THE PELL MEDALS

In 1849, Duncan C. Pell, by a gift of $500, established a fund the interest on which is devoted to the purchase of a gold medal, to be awarded annually to the student who shall rank highest in all the studies of the year taken together; and in 1856 the donor authorized the trustees of the fund to devote a portion of the income to the provision of a silver medal to be given to the student who shall rank second.

Trustees: The President of the Board of Education and the President of the College.

THE CROMWELL MEDALS

In 1850, Charles T. Cromwell, by a gift of $500, established a fund the interest on which is devoted to the purchase of a gold medal to be awarded annually to the best scholar in history and belles-lettres; in 1856 the donor authorized the provision of a silver medal for the second scholar.

Trustees: The President of the College, the Professor of History (Treas.), and Mr. Henry P. Davison.

THE PRIZE OF THE BOARD OF TRUSTEES AND THE FREIBERG MEMORIAL PRIZE FOR PUBLIC SPEAKING

In 1852, the President of the Board of Education provided a prize for excellence in public speaking. It is continued by the present Board of Trustees.

Members of the junior and senior classes present original orations to compete for the privilege of entering the contest, which is held semi-annually. Six of the orations are selected to be delivered in public for the prize.

In 1920, the Omega Pi Alpha Fraternity established a prize for excellence in public speaking, in memory of Hyman Freiberg of the class of 1915, who was killed in action in France in August, 1918, under circumstances of heroism that earned for him the Distinguished Service Cross. This prize is awarded to the student who stands second in the competition for the Prize of the Board of Trustees.

THE WARD MEDALS

In 1853, Augustus H. Ward, by a gift of $1,000, established a fund the interest on which provides for the award of twenty bronze medals, one for each of the studies named, to be awarded annually to the student of most proficiency therein, provided he shall have regularly pursued such study for not less than two months of the collegiate year then closing; a student gaining one

medal not to be precluded from gaining others at the same time or subsequently.

The subjects are: Chemistry, Natural History, Natural Philosophy, Moral Philosophy, Political Science, English, Greek, Latin, French, Spanish, German, Oratory, Composition, Logic, Astronomy, History, Drawing, Algebra and Geometry, Descriptive Geometry, Botany.

Trustees: The Board of Education, the President of the College, and their successors.

THE RIGGS MEDAL

In 1864, Elisha Riggs, by a gift of $1,000, established a fund the interest on which provides a gold medal to be annually awarded to the author of the best English prose composition in the senior or junior class. The subject is announced early in the year, and the essays must be handed in on the last day of recitations in May, each signed with a pseudonym and accompanied by the student's real name in a sealed envelope.

Trustees: The President of the College, the Professor of History, and the Professor of the English Language and Literature (Treas.).

THE KELLY PRIZES

In 1869, James Kelly, by a gift of $1,000, established a fund the interest on which provides two prizes for debate and literary criticism. One prize is given to the best debater in the literary societies, three contestants being chosen by the Clionian Society, and three by the Phrenocosmian. The Chairman of the Board of Trustees selects the subject and submits it to the Faculty for approval.

The other prize is given to the member of either society who shall write the best critique on some work of English literature. The subject is announced before the Christmas vacation, and the essays must be handed in on the last day of recitations in May.

The judges of the debate are selected by the Chairman of the Board of Trustees; the judges of the essays are the President of the College, the Professor of History and the Professor of the English Language and Literature.

Trustees: The Board of Trustees of the College.

THE CLAFLIN MEDALS

In 1871, John Claflin, by a gift of $1,250, established a fund the interest on which provides two gold and two silver medals, which are awarded as follows:

A gold medal to the student of the senior class electing Greek who shall pass the best competitive examination in that subject and a gold medal to the student of the senior class elect-

ing Latin who shall pass the best competitive examination in that subject, it being provided, however, that in either subject the medal may be offered to the junior instead of to the senior class, at the discretion of the Head of the Department; a silver medal to the student of the freshman class most proficient in Greek; and a silver medal to the student of the freshman class most proficient in Latin.

Trustees: The President of the College, and Mr. George C. Lay (Treas.).

THE BELDEN PRIZES

In 1883, William Belden, by a gift of $1,000, established a fund the interest on which provides prizes for excellence in pure mathematics, the nature of the prizes and the terms of their award to be determined from time to time by the President of the College and the Professor of Pure Mathematics.

At present the prizes are awarded annually on Commencement Day, in the junior and sophomore classes, as follows:

1. A gold medal to the student in each class of greatest proficiency in the studies of the department during the year, such proficiency being determined either by the marks from recitations and examinations, or by a special competitive examination, as may seem best to the Trustees of the prize.

2. A silver medal to any other student, in either class, whose aggregate marks for recitations and examinations shall reach ninety-five per cent of the maximum.

Trustees: The President of the College, and the Professor of Pure Mathematics (Treas.).

THE KETCHUM PRIZES

In 1891, Col. Alexander P. Ketchum, of the Class of 1858, by a gift of $1,000, established a fund the interest on which provides two prizes in the history of philosophy and two prizes in political economy, the awards to be made by the professors, on the papers presented in the regular final examination.

Trustees: The President of the College, Dean Brownson, and Mr. W. Rogers Westerfield.

THE ROEMER PRIZE

In 1892, upon the death of Professor Roemer, it was found that for thirty-eight years he had provided anonymously a prize for the declamation of poetry. In recognition of this fact and in honor of his memory and name, the Roemer Prize Fund was established by a gift of $300 from a group of officers and graduates of the College. The speakers are selected from the sophomore class by competition. The declamations are delivered on the same occasion as the orations, and judged by the same judges.

Trustees: The Chairman of the Board of Trustees of the College, the President of the Associate Alumni, and Professor Saurel.

THE BENNETT PRIZE IN POLITICAL SCIENCE

In 1893, James Gordon Bennett, by the gift of $1,000, established a fund the interest on which provides a prize to be given annually upon Commencement Day to the "member of the senior class who shall have taken the prescribed course of the institution in Political Science and English Literature, and who shall have prepared the best essay in English prose upon some subject of American governmental domestic or foreign policy of contemporaneous interest." The subjects are selected and the rules of competition announced and the decision rendered by the Faculty of the College.

Trustees: The Board of Trustees of the College.

THE RALPH WEINBERG MEMORIAL PRIZE

In 1898, Mrs. Miriam Richter, by a gift of $500, established a fund the interest on which provides an annual prize in memory of Ralph Weinberg, of the class of 1897. It is awarded to that student of the College who presents the best poem upon a topic selected by the Professor of the English Language and Literature.

Trustees: The President of the College, the Professor of History, and the Professor of the English Language and Literature (Treas.).

THE PRAGER MEMORIAL PRIZE

In 1903, William Prager, by a gift of $1,000, established a fund the interest on which provides a prize in memory of his son, David Prager, of the class of 1903, which is awarded to that member of the senior class who receives the highest aggregate mark in his studies for the senior year.

Trustees: The Chairman and the Secretary of the Board of Trustees, and the President of the College.

THE KENYON PRIZE

In 1904, Wm. Houston Kenyon, Alan D. Kenyon, and Robert N. Kenyon, all graduates of the College, by the gift of $1,000, established a fund the interest on which provides a gold and a bronze medal, to be awarded from time to time to students who attain unusual distinction in pure and applied mathematics. The trustees of the fund determine the award.

Trustees: The President of the College, the Professor of Mathematics, and Mr. Wm. Houston Kenyon.

THE GENERAL TREMAIN PRIZES

In 1909, General Henry Edwin Tremain, of the class of 1860, established a trust of $5,000, to be invested in savings banks in New York, the income to be used for the two prizes; the first prize of one hundred and fifty dollars, and the second

prize of fifty dollars; such prizes to be awarded annually, under rules and regulations to be made by the Faculty of the College, for the best essays on the theme, "Causes, Conduct and Conclusions of the Great Civil War in the United States." The competitors are to be members of the senior and junior classes, and the prizes are awarded by two judges annually selected, one by the Faculty and one by the Commander for that year of the New York Commandery of the Military Order of the Loyal Legion of the United States; the two judges thus selected, in case they disagree as to the award, appoint a third judge.

Trustees: The President of the College (Treas.), the Professor of History, and the Professor of English.

THE JAMES R. STEERS PRIZE

In 1912, James R. Steers, of the class of 1853, established a fund of $1,000, the interest on which is devoted to the payment of an annual prize, or semi-annual prizes, for excellence in the Department of Art, the basis for such award, and the character of such award or awards, to be determined from time to time by the trustees of this Fund.

Trustees: The President of the College, the Professor of Art and the Chairman of the Board of Trustees.

THE MENORAH PRIZE

Through the generosity of the Hon. Bernard M. Baruch, of the class of 1889, the Menorah Society of the College of the City of New York offers a prize of $100 to that undergraduate student who submits the best essay on some phase of Jewish life, dealing with the literature, history, or achievements of the Jewish people. The topics and the conditions of the competition are announced by the Menorah Prize Committee.

PRIZE OF THE COLONIAL DAMES

An annual prize of $50 and a silver medal, for a dissertation on a subject connected with American colonial history, are offered by the Colonial Dames of the State of New York.

THE MEYER COHN ENGLISH PRIZE

In 1919, Abraham Cohn, in memory of his son, Meyer Cohn, of the class of February, 1914, who was killed as a soldier in France on October 13, 1918, presented to the College a Liberty Bond of one thousand dollars, the interest of which for each half year constitutes a prize for excellence in English. It is awarded to the member of the graduating class who shall write the best English essay upon a subject selected by the Professor of the English Language and Literature.

THE DIVINSKY MEMORIAL MEDAL

In 1920, the Tau Delta Phi Fraternity established, in memory of their deceased brother, Jacob G. Divinsky, of the class of 1918, an annual medal to be awarded at Commencement to the senior who has made the best record in the eight prescribed courses of the department of Public Speaking.

THE DUPONT SCHOLARSHIP

In 1918 the E. I. DuPont de Nemours Co. of Wilmington, Delaware, established a "DuPont Scholarship," of $350, for a selected student, who makes chemistry or chemical engineering his major subject.

THE HENRY E. TREMAIN SCHOLARSHIPS

In November, 1919, the Students' Aid Association established at the College ten scholarships, of amounts not to exceed $250 each, to be known as the Henry E. Tremain Scholarships. These are awarded annually to students who stand high in their studies and who are in need of some financial assistance.

THE STUDENTS' AID ASSOCIATION

In 1857 the Associate Alumni established a fund for the purpose of granting pecuniary aid to such students as might otherwise find difficulty in completing their College course. This fund is maintained by contributions from the alumni. In 1865 the Students' Aid Association was incorporated under the laws of the State of New York. The management of the fund is committed to five trustees, who loan, without interest, such sums as they think proper to deserving students. Neither the names of those to whom the loans are made, nor the amounts of the loans, are known to any but the trustees and the auditors of the fund. In November, 1919, the Association established the Henry E. Tremain Scholarships, which are described in the preceding section.

Further information may be obtained by consulting any one of the trustees.

The following are the present trustees:

John R. Sim, '68, President.....536 West 156th Street.
Edmund Burke, '90, Treasurer .....Room 224, College.
Alfred D. Compton, '97, Secretary....Room 116, College.
Sigmund Pollitzer, '79 .....1 West 70th Street.
Wm. Houston Kenyon, '76 .....61 Broadway.

STUDENT GOVERNMENT

Supervision of student activities and control of interclass functions are in the hands of a Student Council which is com-

posed of representatives chosen by the students. Regular meetings are held at which questions concerning the welfare of the students and of the College are discussed. The results have been helpful both to the student body and to the Faculty.

PLEDGE OF LOYALTY

Each student entering the College is required,[1] at the time of entering, to sign the following pledge:

"As some small recognition of the large gift of education which, in the American spirit of freedom and self-government, is now offered me by the College of the City of New York, I hereby pledge myself as follows:

"1. I will be actively loyal in the support of constitutional government in the United States and in the State and City of New York and in this College.

"2. I will seek to preserve and even to enhance the value of all public property now or hereafter entrusted to my care.

"3. As a student I will uphold the discipline and order of the College."

COLLEGE ASSEMBLIES

During the college term there is a regular weekly assembly in the Great Hall, at which attendance is required of the students in the Day Session of the College, as in former years at the daily "chapel" exercise which was customary when the College was smaller and its programs less complex. College singing is given a prominent place at these gatherings.

LITERARY SOCIETIES

Two literary societies, the Clionian and the Phrenocosmian, have for many years been maintained by the students of the College. Membership in these is confined to the students of the junior and senior classes. A third society, the Adelphian, is supported from the freshman and sophomore classes. They are devoted to the cultivation of the arts of composition, oratory and debate, and the promotion of friendly intercourse between students. Weekly meetings are held during the collegiate year. The first two societies annually choose the contestants for the Kelly Prize Debate.

ATHLETICS

The athletic organizations of the College are under the supervision of the Faculty Athletic Committee. This committee has adopted and published rules for the purpose of maintaining a proper academic standing among the athletes of the institution,

[1] By resolution of the Board of Trustees, Nov. 25, 1919.

and of securing a clean amateur policy in the various student athletic enterprises. No student is permitted to go into training whose organic condition makes such a procedure unsafe.

The executive work connected with the management of the teams and the general administrative details are conducted by an Athletic Association through a board of officers elected by the students.

This Association offers a number of opportunities to those students who desire to secure business and managerial experience in connection with athletic enterprises. The College supervision of these enterprises restricts student initiative as little as possible although a careful and persistent effort is made to secure reliable and effective business methods in all of the transactions of the Association. This supervision of business details is secured through the authority of the Faculty Athletic Committee and through the services of various instructors in the Department of Hygiene. The services of instructors from other departments are frequently utilized for this purpose.

The Stadium immediately adjoining the Hygiene Building has been equipped for both indoor and outdoor work throughout the college year.

COLLEGE PERIODICALS

Every periodical or paper published by the students, and sold or distributed by them within the College, must have printed upon it the name of the managing editor, who shall be a student.

No such periodical or paper shall be sold or distributed in the College until the President shall be satisfied that the foregoing regulation has been complied with.

It shall be the duty of the managing editor to maintain a suitable standard of intelligence, propriety and courtesy, and he will be held responsible for the performance of this duty.

No periodical or paper, whose managing editor has been adjudged by the President or Faculty of the College to have failed to conform with this principle, shall be sold or distributed in the College while he remains an editor.

The rules of the Board of Trustees in regard to societies in the College shall apply to all student publications.

THE COMMITTEE ON EMPLOYMENT

In view of the large number of students of the College who contribute toward their own support, a Committee on Employment has been appointed from the Faculty. The Committee maintains an Employment Bureau with an office in Room 305A, Main Building (telephone Audubon 1280). The Bureau not only places men in positions of all kinds, permanent as well as temporary, but also takes note of their scholarship in order that

their outside work may not interfere unduly with their studies. The services of the Bureau are at the disposal of all students of the College.

Until March 1, 1918, all the expenses of the Bureau were defrayed by the Faculty, the alumni, and other friends of the College. On that date the Bureau came under the general direction of the Students' Aid Association, the Faculty having accepted a scheme of control and co-operation proposed by the Association. Generous gifts by friends of the College supplemented by appropriations by the Association have enabled the Bureau to employ an experienced manager.

No fee is charged to the students, but the faithful performance of work secured for them is required.

THE CITY COLLEGE CO-OPERATIVE STORE

In September, 1916, by authority of the Board of Trustees, a committee composed of three members of the student body and four members of the Faculty opened a Co-operative Store. The details of the business are carried on by a student manager and student salesmen. The Store sells books, stationery, athletic supplies, and all manner of articles needed by students in their college work. The Store attempts to make only such profits as will enable it to pay expenses, provide against losses and build up a small working capital.

TERMS AND VACATIONS

The collegiate year, aside from the Summer Session, is divided into two terms; it ends, with the Commencement in June, on the fortieth Thursday after the opening of college exercises in September.

There are three vacations in each year, the summer, winter, and spring vacations being at such times as the Board of Trustees may from time to time designate. There are no college exercises on Lincoln's birthday, on Washington's birthday, on Good Friday, on Memorial Day, on Labor Day, on Columbus Day, on Election Day, or on Thanksgiving Day or the Friday following.

COLLEGE OF LIBERAL ARTS AND SCIENCE

Faculty and Instructing Staff

Arranged by Departments

Sidney Edward Mezes, Ph.D., LL.D., *President*
Carlton L. Brownson, Ph.D., *Dean*
Frederick G. Reynolds, LL.B., Sc.D., *Secretary*

ART

Leigh Harrison Hunt, M.S., M.D.,	*Professor*
Engelbert Neus, A.M.,	*Assistant Professor*
George C. Autenrieth, A.M.,	*Assistant Professor*
J. Redding Kelly,	*Assistant Professor*
Abram G. Schulman, A.B.,	*Instructor*
William H. Haskell,	*Instructor*
Alfred Noel Appleby, B.S.,	*Fellow*

BIOLOGY

George G. Scott, Ph.D.,	*Associate Professor*
Abraham J. Goldfarb, Ph.D.,	*Assistant Professor*
William Ward Browne, Ph.D.,	*Assistant Professor*
Earl Albert Martin, A.M.,	*Assistant Professor*
Herbert Ruckes, A.M.,	*Instructor*
Joseph Tulgan, A.B.,	*Fellow*
Robert Patterson,	*Fellow*

CHEMISTRY

Charles Baskerville, Ph.D., F.C.S.,	*Professor*
Herbert R. Moody, Ph.D.,	*Professor*
Reston Stevenson, Ph.D.,	*Associate Professor*
Louis J. Curtman, Ph.D.,	*Assistant Professor*
William L. Prager, Ph.D.,	*Assistant Professor*
Robert W. Curtis, Ph.D.,	*Assistant Professor*
William L. Estabrooke, Ph.D.,	*Assistant Professor*
[1] Hermon C. Cooper, Ph.D.,	*Assistant Professor*
Arthur Schutt,	*Instructor*
Walter H. Pearce,	*Special Instructor*
John E. Brolles, Jr., B.S.,	*Special Instructor*
Max Meltsner, M.S.,	*Tutor*
William B. Jones,	*Special Tutor*
Joseph A. Babor, A.M.,	*Tutor*
Edward E. Cohen, B.S.,	*Tutor*
David Hart, B.S.,	*Tutor*
Martin Meyer, B.S.,	*Tutor*
Alexander Lehrman, B.S.,	*Tutor*
Sidney Liebgold,	*Special Tutor*
Moses Chertcoff, B.S.,	*Fellow*
Wyly McGehee Billing, B.S.,	*Fellow*
Foster Dee Snell, B.S.,	*Fellow*
Alexander C. Glennie, A.B.,	*Fellow*
Harry Peter Coats, A.M.,	*Fellow*
Nathan H. Hecht,	*Fellow*
Alexander Cohen, A.B.,	*Fellow*

[1] Absent on leave.

CLASSICAL LANGUAGES AND LITERATURES

Carleton L. Brownson, Ph.D.,	*Professor*
August Rupp, A.B.,	*Associate Professor*
Allan P. Ball, Ph.D.,	*Associate Professor*
[1] Mario Emilio Cosenza, Ph.D.,	*Associate Professor*
Edmund Burke, A.B.,	*Associate Professor*
Carroll N. Brown, Ph.D.,	*Associate Professor*
[1] Emory B. Lease, Ph.D.,	*Associate Professor*

ECONOMICS

Frederick B. Robinson, Ph.D.,	*Professor*
Guy Edward Snider, Ph.D.,	*Associate Professor*
Lynn Mateer Saxton, Pd.D.,	*Assistant Professor*
George Monroe Brett, A.B.,	*Assistant Professor*
Samuel MacClintock, Ph.D.,	*Lecturer*
Arthur E. Albrecht, M.A.,	*Instructor*
John R. B. Byers, M.S.,	*Instructor*
Alexander L. Pugh, B.S. in Econ.,	*Instructor*[2]
Thomas P. Kelly, A.M.,	*Instructor*[2]
A. L. Wilbert, M.A.,	*Special Instructor*[2]
William A. Patterson, A.M.,	*Special Instructor*[2]
John M. Connolly, A.B.,	*Tutor*[2]
A. Y. Cowen, A.B.,	*Tutor*[2]
John Horace Mariano, Ph.D.,	*Tutor*[2]

EDUCATION

[3] Stephen Pierce Duggan, Ph.D.,	*Professor*
Paul Klapper, Ph.D.,	*Associate Professor*
Samuel B. Heckman, Ph.D.,	*Associate Professor*
James Robert White, Ph.D.,	*Assistant Professor*
William Armand Hannig, Ph.D.,	*Instructor*[2]
Sol Bluhm, A.M.,	*Instructor*[2]
Egbert M. Turner, A.M.,	*Instructor*
Julius A. Miller, M.D.,	*Psychiatrist.*
E. R. Brand, A.B.,	*Tutor*
Maurice Iserman, B.S.,	*Fellow*

ENGINEERING

Alfred N. Goldsmith, Ph.D.,	*Associate Professor*
Frederick Skene, B.S., C.E.,	*Associate Professor*
Arthur Bruckner, B.S., M.E.,	*Assistant Professor*
Frederic O. X. McLoughlin, A.M., C.E.,	*Assistant Professor*

ENGLISH

Lewis Freeman Mott, Ph.D.,	*Professor*
Harry C. Krowl, Ph.D.,	*Associate Professor*
Charles F. Horne, Ph.D.,	*Associate Professor*
Alexis I. du Pont Coleman, A.M.,	*Associate Professor*
Earle Fenton Palmer, Ph.D.,	*Associate Professor*
Alfred D. Compton, B.S.,	*Assistant Professor*
Joseph Vincent Crowne, Ph.D.,	*Assistant Professor*
William Bradley Otis, Ph.D.,	*Assistant Professor*
Felix Grendon, Ph.D.,	*Assistant Professor*
Donald G. Whiteside, A.M.,	*Assistant Professor*
Bird Stair, M.S.,	*Assistant Professor*
Thomas Gaffney Taaffe, Ph.D.,	*Instructor*

[1] Relieved of duty in the College of Liberal Arts and Science.
[2] In the Evening Session.
[3] Absent on leave.

GEOLOGY

Ivin Sickels, M.S., M.D.,	*Professor*
Bertram T. Butler, A.M.,	*Instructor*

GERMAN

Camillo von Klenze, Ph.D.,	*Professor*
Henry G. Kost, B.S.,	*Assistant Professor*
Carl W. Kinkeldey, Ph.D.,	*Instructor*

GOVERNMENT AND SOCIOLOGY

William B. Guthrie, Ph.D.,	*Associate Professor*
Joseph Lorenz, A.B., LL.B.,	*Tutor*[1]

HISTORY

Nelson P. Mead, Ph.D.,	*Associate Professor*
Holland Thompson, Ph.D.,	*Associate Professor*
Livingston Rowe Schuyler, S.T.B., Ph.D.,	*Associate Professor*
J. Salwyn Schapiro, Ph.D.,	*Associate Professor*
Thomas R. Moore, Ph.D.,	*Associate Professor*
Livingston Burrill Morse, B.S.,	*Assistant Professor*
Austin Baxter Keep, Ph.D.,	*Instructor*
Morton Gottschall, A.B., J.D.,	*Instructor*

HYGIENE

Thomas Andrew Storey, Ph.D., M.D.,	*Professor*
Frederic A. Woll, Ph.D.,	*Associate Professor*
Herbert Miles Holton, B.S.,	*Assistant Professor*
Walter Williamson, B.A.,	*Assistant Professor*
Lionel B. McKenzie,	*Special Instructor*
Richard J. O'Neil,	*Instructor*
Canute Hansen, D.D.S.,	*Instructor*
Paul H. Reichardt,	*Instructor*
Radford J. McCormick,	*Special Instructor*
Nathan Holman,	*Special Instructor*
Walter Scott Heard, D.D.S.,	*Tutor*
John James Dailey,	*Tutor*
Berton Lattin, A.B., M.D.,	*Tutor*
[2] Raymond Forrest Purcell,	*Tutor*
[2] Edwin T. Hauser, A.B.,	*Tutor*
[3] Edward F. Walsh, M.D.,	*Tutor*
Frank W. Wheeler,	*Tutor*
Oswald La Rotonda, M.D.,	*Tutor*
Jack E. Rider,	*Tutor*
George H. Schmidt, A.B.,	*Tutor*
Robert Alan Ambler, A.B.,	*Tutor*
Samuel E. Cantor,	*Tutor*
Harry Karlin,	*Tutor*
Harry H. Haas,	*Tutor*
Hubert C. Dorsey, B.S., M.D.,	*Tutor*

MATHEMATICS

Paul L. Saurel, D.Sc.,	*Professor*
Frederick G. Reynolds, LL.B., Sc.D.,	*Professor*
Joseph Allen, A.M.,	*Associate Professor*

[1] In the Evening Session.
[2] Absent on leave.
[3] Resigned Sept. 30, 1920.

Frederick M. Pederson, E.E., Sc.D.,	*Assistant Professor*
Arthur B. Turner, Ph.D.,	*Assistant Professor*
[1] Maxmilian Philip, Sc.D.,	*Assistant Professor*
Edward E. Whitford, Ph.D.,	*Assistant Professor*
Paul H. Linehan, Ph.D.,	*Assistant Professor*
Warren G. Hubert, Sc.D.,	*Assistant Professor*
Robert F. Smith, M.S.,	*Assistant Professor*
John Alfred Brewster, A.B.,	*Assistant Professor*
Harris Franklin MacNeish, Ph.D.,	*Assistant Professor*

MILITARY SCIENCE AND TACTICS

Samuel B. Arnold, Lt. Col., Ret., U. S. A.,	*Professor*
Derby Crandall, Jr.,	*Captain, U. S. A.*

MUSIC

Samuel A. Baldwin, F.A.G.O.,	*Professor*

PHILOSOPHY

[1] Harry Allen Overstreet, B.Sc. (Oxon.)	*Professor*
David F. Swenson, B.S.,	*Professor*
Morris Raphael Cohen, Ph.D.,	*Associate Professor*
John Pickett Turner, Ph.D.,	*Associate Professor*
Howard D. Marsh, Ph.D.,	*Assistant Professor*

PHYSICS

William Fox, B.S., M.E.,	*Professor*
Charles A. Corcoran, A.M.,	*Assistant Professor*
Leighton B. Morse, Ph.D.,	*Assistant Professor*
Roy Fisher Leighton, M.S.,	*Instructor*
Alexander Marcus, B.S.,	*Instructor*
Robert Dressler,	*Tutor*
A. R. MacCleave, C.E.,	*Tutor*
Abraham M. Goldstein, B.S.,	*Tutor*
Henry Bredekamp,	*Fellow*
Arthur A. Heberlein,	*Fellow*
Mark Waldo Zemansky,	*Fellow*
Meyer Langer, B.S.,	*Fellow*

PUBLIC SPEAKING

Erastus Palmer, A.M.,	*Professor*
Daniel W. Redmond, Ph.D.,	*Associate Professor*
Joseph A. Mosher, Ph.D.,	*Assistant Professor*
Robert H. Hatch,	*Instructor*
Gustav F. Schulz, A.M.,	*Instructor*
Joseph X. Healy, A.M.,	*Instructor*
Thomas E. Coulton, A.M.,	*Tutor*

ROMANCE LANGUAGES

Charles A. Downer, Ph.D.,	*Professor*
[1] Victor Emanuel François, Ph.D.,	*Associate Professor*
Ventura Fuentes, A.B., M.D.,	*Associate Professor*
Gaston A. Laffargue, B-ès-L.,	*Assistant Professor*

[1] Absent on leave.

Felix Weill, L-ès-L.,	*Assistant Professor*
Americo Ulysses N. Camera, Ph.D.,	*Assistant Professor*
William E. Knickerbocker, Ph.D.,	*Instructor*
Alfred G. Panaroni, B.S.,	*Instructor*
Alfonso Arbib-Costa, Dipl.,	*Instructor*
Maxime L. Bergeron, Ph.D.,	*Instructor*
Manuel Dávalos, B.A.,	*Tutor*[1]
Alfred Iacuzzi, A.M.,	*Tutor*[1]
John Castro, Dipl.,	*Tutor*[1]

STANDING COMMITTEES

Course and Standing: Professors Mott, Brownson, Thompson, Moody, and Redmond.

Curriculum: Professors Mott, Downer, Baskerville, Brownson, Robinson, Reynolds, Mead, Klapper, J. P. Turner, and Scott.

[1] In the Evening Session.

Courses in the Several Departments

Each of the following courses is offered, in the Day Session, each term, unless another arrangement is specified.

Starred courses are offered in the Evening Session also, during the year 1920-1921. *Courses marked* (†) *were offered in the Summer Session of* 1920.

Certain courses offered by the School of Technology and the School of Business and Civic Administration are open to students in the College of Liberal Arts and Science, as is indicated in the following pages. These courses are subject, as to fees, etc., to the regulations of the schools in which they are offered.

Courses classed as "restricted" may be counted toward a liberal degree only to an amount not exceeding one-half of the total number of elective credits which a student must obtain in order to be a candidate for such a degree.

ART

The work in this department includes courses in the following subjects: freehand drawing, mechanical drawing, descriptive geometry, shades and shadows, perspective, aesthetics, and the history of modern art.

The courses in freehand drawing aim to give the student the knowledge and skill required for a correct reproduction of geometrical forms, and of artificial and natural objects, and by this training to develop his perceptive faculties in the just appreciation of lines, forms, proportions, light and shade, color values, etc. In the advanced course attention is given to the further development of taste, to the elements of design, and to the use of color. These courses, in connection with the work in aesthetics and the history of art, give preparation of special value to those who aim to become teachers of drawing, writers on art, or museum employees.

The courses in mechanical drawing and descriptive geometry are planned with especial relation to the requirements of subsequent technological work, particularly the study of the engineering professions and architecture.

The course in aesthetics and the history of modern art embraces a brief consideration of the philosophy and psychology of art and its bearing upon human life. The history of the evolution of the various forms of historic art, in architecture, sculpture, painting, and the other graphic arts, together with their relation to general history, is given in a series of fully illustrated lectures, and visits are made to the Metropolitan Museum of Art

and to the various large galleries at which special exhibitions are held.

The casts belonging to the department are very fine, most of them having been taken from early moulds. The collection contains many beautiful examples of the Phidian era, the most notable being a large number from the Frieze of the Parthenon, and a few of the best preserved Metopes; the heroic statues of Theseus and Cephisus and a Caryatid from the Erectheum. These copies of the Elgin Marbles were given by Charles M. Leupp, Esq. There are, furthermore, the busts of Jupiter from Otricoli, the Venus of Milo, the Venus of Arles, Juno, the Hermes, the Apollo Belvedere, the Belvedere Torso and examples of the work of Michael Angelo, Cellini and Thorwaldsen.

This department also makes use of a collection of about 275 photographs, the gift of the Class of '75, illustrating the architecture and sculpture of the Greeks and Romans, early Christian and Renaissance painting in Italy and a number of the most noted buildings of all European countries. Each photograph is marked with the name, the date of production and the present location of the subject represented. East Indian, Egyptian, Romanesque and Gothic architecture are likewise illustrated by a number of photographs purchased by the College; and a collection of over 500 lantern slides is used in the lectures on the history of the fine arts.

***1-*2. Descriptive Geometry and Mechanical Drawing.**
Professors Hunt, Neus, Autenrieth, and Kelly.

The course in descriptive geometry aims to familiarize the student with the means afforded by this applied science and art for complete graphic expression of forms and their relation in space; further, to develop his projective imagination, as well as to habituate him to accuracy, clearness and neatness in execution.

It consists of lectures, recitations, and practice on problems in descriptive geometry involving lines, planes, surfaces, solids; their relations, tangencies, intersections, and development. The 1st and 3d angle methods of mechanical drawing are derived from the principles of descriptive geometry, and are illustrated by working drawings of simple constructions.

Prescribed for students in Science; elective for others. Two terms; four hours a week; 4 credits.

11. Shades, Shadows and Perspective. *Professor Hunt.*

Theory of shades and shadows. Shadows of mechanical and geometrical objects on planes; of solids on solids with special reference to rendering of mechanical and architectural drawings.

Theory of perspective; its basis in descriptive geometry. Discussion of and practice in the vanishing and division point method, and in the so-called ground-plan and "office" methods.

All of Art 11 is given with reference to work pursued later by those electing Art 115-116.

Prerequisite: Art 1-2. Fall term, six hours a week; 2 credits.

***112. Mechanical Drawing.**

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 145.

***113. Topographical Drawing.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 145.

115-116. Architectural Drawing.

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 145. (Not given in 1920-21.)

117. Architectural Drawing.

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 146.

201. Advanced Mechanical Drawing and Elementary Machine Design.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 146.

21. Freehand Drawing. *Professor Hunt.*

Instruction and practice in freehand drawing and applied pictorial perspective, with special view to the needs of future teachers of drawing, as well as to the making of graphic notes or records in connection with chemistry, physics, or biology.

Four hours a week; 2 credits.

22. Advanced Freehand Drawing. *Professor Hunt.*

Drawing from casts, natural objects, articles of glass, pottery, etc., involving the rendering in black and white of color values; from casts of the human figure in part or entire; practical application of perspective; the elements of decorative design; the use of water color, and instruction in the teaching of art. The course, in connection with 31-32, Aesthetics, enables the student to prepare for the intelligent and effective teaching of art.

Four hours a week; 2 credits.

23-24. Poster Design and Advertising.

Principles of decorative design and practice in technique in the various media used in commercial art. Book-cover and page decoration, poster design, lettering and the methods of photo-engraving and color processes of reproduction constitute the

essential part of the course. Visits are made to advertising, lithographic and printing establishments.

Prerequisite: evidence of ability in drawing sufficient to warrant admission to the course. Two terms, four hours a week; 2 credits per term; offered in alternate years, 23 to alternate with 115, and 24 with 116. (Offered in 1920-21.)

25. Still-life Drawing and Painting.

Still-life rendering in black and white, oil monochrome followed by practice in oil painting in full chromatic values. Theory of color harmony and contrast. Practice in the various media used in painting, water color, opaque water color, pastel and tempera. Stress is laid on pictorial composition, beauty of line, light and shade, balance and composition.

Fall term. Prerequisite: evidence of ability in drawing sufficient to warrant admission to the course. Four hours a week; 2 credits.

31-32. Aesthetics and the History of Modern Art.

Professor Hunt.

Lectures on the history of painting and other graphic arts, sculpture, architecture, and the minor arts; the place of the fine arts in the history of civilization; the appreciation of art; historic ornament. The course aims to give the student such comprehension of the subject as is essential to a liberal education; it has special value for those who may devote themselves to teaching, to writing or criticism in connection with art, or to other pursuits requiring knowledge and training in matters of taste. Students have special privileges for visiting the Metropolitan Museum of Art, and are invited to the galleries where important exhibitions of old and new masters are held.

Two terms, beginning in fall, two hours a week each term; 3 credits.

Comparative Literature and Art (English 41-42).

This course offers a general view of ancient, mediaeval and modern literature and art. There are two lectures and one recitation each week; note-books will be examined and reports will be required on assigned reading and on objects of art. For details see page 97.

Prerequisite: English 3 and one year of college work in a foreign language. Either this course or a third language is prescribed for Arts students; elective for others. Two terms, three hours a week; 6 credits.

BIOLOGY

†*1. General Biology. *Professor Scott.*

This subject deals with the fundamental laws and principles which underlie all the biologic sciences. The structure, functions, development, behavior and history of living things will be discussed and in addition studied in the laboratory by the use of selected types. This course furnishes the necessary basis for more advanced work in botany and zoology. Text-book: Conn's *Biology.*

Prescribed for all students; two lectures, one recitation and four laboratory hours a week; 4 credits.

Students wishing to take elective courses should consult the chairman of the Department.

11. Plant Morphology. *Mr. Ruckes.*

A study of the structure and life histories of representative plants from the more important groups; histology of plant organs; problems of sex; problems of evolution and heredity; a study of plant relationships and classification. Field study. Preserving and mounting of plant specimens.

Spring term: one lecture, one recitation and four laboratory hours a week; 3 credits.

12. Physiology of Plants. *Mr. Ruckes.*

Lectures, laboratory and field work on the conditions affecting the life of plants, their physical and mechanical properties, metabolism and the formation of sugars, starch, cellulose, tannin, glucosides, oils, fats, organic acids, etc. Experiments include problems relating to respiration, nutrition, absorption and movement of water and gases, food distribution, response to stimuli, growth, effect of environment, and reproduction. Practical work in the study of soils, fertilizers, seed testing, variation, etc., is included.

Fall term; one lecture, one recitation and four laboratory hours a week; 3 credits.

***13. Applied Botany.** *Mr. Ruckes.*

Is designed as a foundation for practical economic botany. Lectures and laboratory work will refer to the more important plants used in the arts and industries. The characteristics, comparative utility and commercial value of foods, textiles, building materials and other plant products will be studied. Field work consists of visits to mills and factories.

Spring term; one lecture, one recitation and four laboratory hours a week; 3 credits.

21. Theoretic Biology. *Professor Goldfarb.*

The fundamental principles involved in recent studies of evolution, heredity, experimental embryology, adaptation and variation will be studied by lecture and discussion. This course is intended for students not specializing in biology. The work will be intermediate in character between the elementary introductory course (Biology 1) and the technical courses (27 and 28) designed for students specializing in biology.

Spring term in alternate years (1922, etc.); three hours a week; 2 credits.

22. Invertebrate Zoology. *Professor Goldfarb.*

This subject affords the student an opportunity of studying some invertebrate animals, their functions, structure, adaptations, history, their relation to man, and their bearing on the theory of evolution.

One lecture, one recitation, and four laboratory hours a week; 3 credits.

†*23. Vertebrate Zoology. (Comparative Anatomy.) *Mr. Ruckes.*

This course consists of lectures on the relationships of the various groups of vertebrates, the comparative anatomy of various systems of organs, and questions relating to the origin and evolution of the different groups. The keynote to the course is the history of the human body in the larger sense of the word. Opportunity for the development of technique in dissection is afforded by the laboratory work.

Two lectures, one recitation, and four laboratory hours a week; 3 credits.

***25. Histology.** *Professor Martin.*

The microscopic study of the various tissues and organs of the vertebrate body with special emphasis on the histology of the human body. A great part of the time, however, will be spent in acquiring a good technique in making microscopical preparations of all kinds.

Fall term; one lecture, one recitation, and four laboratory hours a week; 3 credits.

***26. Embryology.** *Professor Martin.*

The lectures treat of the general processes of animal ontogeny such as formation of sex cells and fertilization. Laboratory work consists in the study of selected stages in the development of the frog, chick and pig.

Spring term; one lecture, one recitation, and four laboratory hours a week; 3 credits.

27. Experimental Biology: Heredity, Etc.
Professor Goldfarb.

Some or all of the following topics will be studied: variation, mutation, selection, heredity, acquired character, influence of environment and experimental evolution.

Prerequisite: Biology 1 and 22. Fall term; three seminar hours and four laboratory hours a week; 3 credits.

28. Experimental Biology: Growth, Etc. *Professor Goldfarb.*

Some or all of the following topics will be studied: growth, regeneration, transplantation, growth in vitro, cancer, experimental embryology, sex determination and animal behavior.

Prerequisite: Biology 1 and 22. Spring term; three seminar hours and four laboratory hours a week; 3 credits.

Courses 27 and 28 are intended for advanced students specializing in biology or related sciences. It is proposed to study critically the larger problems of biology, to give the requisite historic development, and to examine each problem in the light of recent experimental researches. Collateral readings, discussion, lectures, and work upon a biologic problem are included. Students may elect one or both courses.

32. Elements of Physiology. *Professor Scott.*

This course deals with the general concepts of the science of physiology, the chemical and physical conditions which underlie and determine the action of the individual organs, and the integrative relationship of the parts of the body.

One lecture, one recitation and four laboratory hours a week; 3 credits.

33. Special Physiology. *Professor Scott.*

A study of the fundamental facts of physiology and methods of investigation. The aim is to give a complete study of certain topics; the phenomena of contraction, conduction, sense perception and the various mechanisms of general metabolism. Laboratory work is arranged to show the methods of physiologic experimentation and to emphasize the necessity of using care and accuracy in their application.

Spring term, two lectures and three laboratory hours a week; 3 credits.

34. Physiology of Nutrition. *Professor Scott.*

The aim of this course is to study broadly the metabolism of the human body. In the development of this plan the following topics will be considered: the food requirements of man, the nutritive history of the physiologic ingredients, the principles of dietetics and their application to daily living.

Fall term, two lectures and three laboratory hours a week; 3 credits.

***41. General Bacteriology.** *Professor Browne.*

Lectures, recitations and laboratory work introducing the student to the technique of bacteriology and to the more impor-

tant facts about the structure and function of bacteria. Special applications of bacteriology to agriculture and the industries are discussed, and brief references are made to the activities of allied microbes, the yeasts and molds. The general relations of bacteria to disease and the principles of immunity and its control are included.

One lecture, one recitation and four laboratory hours a week; 3 credits.

***142. Bacteriology of Foods.**

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 146.

***143. Bacteriology of Pathogenic Micro-organisms.**

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 147.

244. Potable and Industrial Water.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 147.

***148. Municipal Sanitation.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 147.

149. Municipal Sanitary Inspection.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 147.

51. Research Work.

Seniors who have completed satisfactorily a sufficient amount of work in the department may be assigned a topic to serve as a basis for a thesis which will be submitted for credit at the completion of the work. The student will receive the advice of the instructor in the subject in which the research falls, but is expected to do as much independent work as possible. The purpose is to introduce the student to research methods and also to foster independence.

The library of the department, in Room 316, is open to all students during college hours. It contains over one thousand volumes on the various biologic subjects. Several private funds are available for developing the library, most important of which are the Steers Fund for books and the Warburg Fund for the purchase of journals.

The museum of the departments of Biology and Geology contains many rare and valuable specimens used in the biological courses.

CHEMISTRY

Note.—Physics 1 *and* 2 *are prerequisite for all work in Chemistry. A deposit to secure excess breakage, etc., is required of all students taking courses in Chemistry.*

A special department certificate may be acquired by completing courses 1, 2, 3, 4, 111, 20, 33, 44, 50, 55 and 70, *with an average of at least* 80 *per cent. or B grade, and on acceptance of a satisfactory report of research prosecuted in one of the departmental divisions* (*Chemistry* 100).

†*1-2. Descriptive Chemistry.

Professors Baskerville and Estabrooke, and Messrs. Babor and Chertcoff and Assistants.

For the student's general culture, acquainting him with the principles of chemical philosophy. Of the thirty-two weeks, most of the time is given to the study of inorganic chemistry, essentially based upon the natural system, but involving the most modern conceptions of physical chemistry. During the second term, when the student has gained sufficient knowledge to appreciate it, parallel reading is assigned in the history of chemistry. The lectures are accompanied throughout the session by weekly recitations or examinations and laboratory work. Text-books: Baskerville's *Inorganic Chemistry,* Smith's *Laboratory Outline of College Chemistry,* Baskerville and Estabrooke's *Progressive Problems in Chemistry,* and Venable's *Short History of Chemistry.*

Prescribed for all students. Two terms; one recitation, two lectures and three laboratory hours a week; 6 credits. The privilege of a limited amount of extra laboratory work is extended to those who wish to avail themselves of the opportunity.

†*3. Qualitative Analysis I.

Professor Curtman and Assistants.

The reactions of the common metals and the more familiar acids are studied from the standpoint of the ionic theory and the mass action law. Laboratory experience is gained in the methods of the systematic analysis of unknown solutions and simple solid substances, emphasis being placed upon the quantitative feature. Text-books: Curtman's *Preliminary Experiments in Qualitative Analysis,* and Baskerville and Curtman's *Qualitative Analysis.*

Prerequisite: Chemistry 1-2. Prescribed for students in Science; elective for others. Laboratory work with a lecture or recitation every week; seven hours a week; 3 credits.

Students wishing electives should consult the head of the Department.

†*4. Quantitative Analysis I.

Professor Curtis and Assistants.

Introductory lectures, problem work and laboratory exercises consisting of analyses typical of the subdivisions of the subject, both gravimetric and volumetric, and including some practice in separations.

Elective, but must be taken by all students intending to take further courses in Chemistry. Prerequisite: Chemistry 3. Lecture or recitation one hour; laboratory work seven hours a week; 3 credits.

Further elective courses in Chemistry may be taken only by those students who have acquired a grade of C or higher in both Chemistry 3 and 4. Continued privilege of electives is contingent upon maintaining a minimum grade of C.

***20. Physical Chemistry.** *Professor Stevenson.*

The lectures cover the entire field of physical chemistry except electro-chemistry, and are supplemented by problems and parallel reading. The laboratory practice includes such topics as standardization of apparatus, thermostats, determinations of molecular weights, viscosity, index of refraction, vapor pressure, velocity of reaction, etc. Special experiments are also laid out for students who indicate a desire to prepare for some particular line of work. Text-books: Walker's *Introduction to Physical Chemistry* and Findlay's *Practical Physical Chemistry.*

Prerequisite: Chemistry 4; Mathematics 5 is desirable. Lectures three hours, and four laboratory hours a week; 3 credits.

***70. Electro-Chemistry.** *Professors Stevenson and Cooper.*

The lectures are upon theoretical and industrial electro-chemistry, and are supplemented by problems and parallel reading. The laboratory practice includes such topics as conductivity, electrolysis, electro-plating, electro-analysis, decomposition voltage, electrolytic reactions and electric furnace syntheses. Text-books: Le Blanc's *Electro-Chemistry* and Findlay's *Practical Physical Chemistry.*

Prerequisite: Chemistry 4; Mathematics 5 is desirable. Lectures two hours, seminar one hour, and four laboratory hours a week; 3 credits.

†*50. Organic Chemistry I. *Professor Prager and Mr. Meltsner.*

The fundamental principles involving the chemistry of carbon compounds are studied. The lectures and recitations deal mainly with the aliphatic series and their derivatives, but at the end of the term a few lectures are devoted to the cyclic series to indicate the lines followed in Chemistry 55. The laboratory practice includes the qualitative examination, synthesis and isolation of typical carbon compounds especially of the aliphatic series. The

quantitative factor is emphasized. Text-books: Norris' *Organic Chemistry* and Norris' *Experimental Organic Chemistry.*

Prerequisite: Chemistry 4. Lectures and recitation three hours, and laboratory four hours a week; 3 credits.

***55. Organic Chemistry II.** *Professor Prager and Mr. Meltsner.*

The lectures and recitations deal with the cyclic and more complex carbon compounds, showing their general significance in living processes, in medicine and in the industries. The laboratory work includes the preparation of cyclic compounds and the quantitative determination of carbon and hydrogen. Text-books: Same as in Chemistry 50, and Gatterman's *Practical Methods of Organic Chemistry.* Preparations are assigned from other works or the journals.

Prerequisite: Chemistry 50. Lecture and recitation two hours and five laboratory hours a week; 3 credits.

***33. Qualitative Analysis II.** *Professor Curtman.*

An extension of Chemistry 3, with which it constitutes one year of Qualitative Analysis. The course is intended for those who wish to specialize in chemistry or to secure advanced standing in a university. It deals with the systematic study of the acids and their detection in complex mixtures; analysis of alloys, mixtures of rarer elements, and industrial products. Textbooks: Curtman's *Preliminary Experiments in Qualitative Analysis,* Baskerville and Curtman's *Qualitative Analysis,* standard works of reference and current journals.

Prerequisite: Chemistry 4, or this may be taken at the same time. The subject may be taken concurrently with any other elective in the Department, except 100, but the maintenance of a grade of C in the other electives is required to receive rating in 33. Lecture or recitation, one hour; laboratory practice nine hours and library two hours a week; 4 credits.

***44. Quantitative Analysis II.** *Professor Curtis.*

An extension of Chemistry 4, with which it constitutes one year of Quantitative Analysis.

Lectures presenting both theory and practice with special reference to recent approved methods in keeping with modern technique. The laboratory work includes determinations of phosphates, titanium, carbon dioxide, the important minor constituents of steel, as phosphorus, sulphur, silicon, etc., analysis of bronzes and of an ore. The course as laid out allows the student to acquire advanced standing in a professional school or university. Text-book: Gooch's or Talbot's *Quantitative Analysis.*

Prerequisite: Chemistry 4. The subject may be taken concurrently with any other elective in the Department, except 100. Lecture or recitation, one hour; laboratory practice eleven hours a week; 4 credits.

111. Advanced Inorganic Chemistry.

Offered in the School of Technology; may be counted without restriction in the College of Liberal Arts and Science; for description, see p. 152.

260. Applied Inorganic Chemistry.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 148.

265. Applied Organic Chemistry.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 148.

*146. Municipal Chemistry.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 149.

*195. Municipal Sanitary Inspection.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 150.

*249. Potable and Industrial Water.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 151.

*159. Food Inspection and Analysis.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 150.

299. The Chemistry of Food and Nutrition.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 150.

280. Chemistry of Metals (Ferriferous).

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 149.

288. Chemistry of Metals (Non-Ferriferous).

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 149.

*246. Technology of Fuel and Gas.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 150.

269. Chemistry of Commerce.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 151.

262. Industrial Chemistry for Engineers other than Chemical Engineers.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 151.

100. Research. *Professor Baskerville and other Professors.*

This course is essentially all laboratory practice, involving research work in one or more divisions of chemistry. Instruction in this course follows the preceptorial plan. An acceptably prepared typewritten report must be filed within the Department as one evidence of the work accomplished. This course is required for a departmental certificate. All the students and professors concerned join in one seminar hour each week.

Prerequisite: Chemistry, 20, 33, 44, 50, 70, or their equivalent. In 1921 Chemistry 111 is also a prerequisite. Laboratory practice and work in the chemical library, with conferences, nine hours a week; 3 credits.

A series of lectures by experts not connected with the College is announced each year. These lectures are open to the public as well as to the students of the College.

The *Museum* has been equipped with many specimens for the illustration of the lectures and observation by the students and the public. Many more valuable exhibits have recently been presented to the College by chemical manufacturers in this country and abroad.

The *Wolcott Gibbs Library of Chemistry,* containing about 6,000 volumes and 7,500 pamphlets, is open from 9 to 5 o'clock, five days in the week, and 9 to 12 on Saturdays, under the supervision of a trained librarian. The library is being added to constantly. Mr. James R. Steers, '53, presented the library with 4,000 volumes and endowed it, so that it is kept abreast of the times with current journals and by purchase of the most modern authoritative works on chemistry.

A City College Chemistry Society, organized and directed by the junior and senior students, meets regularly, the programmes of the meetings being posted on the bulletin board of the Department. Members of the staff attend the meetings, and from time to time arrange excursions to works where chemistry as applied to commerce is seen and studied in operation. Papers and digests of the current journals in English, German, French, and Italian are presented and discussed. Graduates are welcomed at these meetings.

CLASSICAL LANGUAGES

GREEK

Courses 1-4 are prescribed for students in Arts who have chosen Greek as their second language.

1-2. Homer.

The *Iliad* or *Odyssey,* with sight reading in Homer or Herodotus, and prose composition.

Two terms, four hours a week; 7 credits.

3. Plato.

The Apology and *Crito,* with sight reading in Xenophon's *Memorabilia* and Aristophanes' *Clouds.*

Four hours a week; 3½ credits.

4. Greek Drama.

Two plays are read, usually one of Euripides and one of Sophocles. Sight reading.

Four hours a week; 3½ credits.

11. Plato.

One or more dialogues entire, with selections from others: *Phaedo, Phaedrus, Gorgias, Protagoras, Republic.* A literary rather than a linguistic or philosophical course, but with due attention to the content of each dialogue and to the history of Greek philosophy.

Prerequisite: Greek 4, or Greek 3 with grade A or B. Fall term, three hours a week; 3 credits.

12. Greek Epic Poetry.

A rapid reading course in either *Iliad* or *Odyssey,* with studies in Homeric antiquities, the Homeric question, etc.

Prerequisite: as for Greek 11. Fall term, three hours a week; 3 credits.

13. The Greek Historians.

Selections from Herodotus and Thucydides, with collateral reading in Plutarch's *Lives.*

Prerequisite: as for Greek 11. Spring term, three hours a week; 3 credits

14. Greek Dramatic Poetry.

A number of plays are read, including at least one of Aeschylus and one of Aristophanes. Lectures on the origin and development and the content and form of Greek drama.

Prerequisite: Greek 4. Spring term, three hours a week; 3 credits.

15. Septuagint and New Testament Greek.

A study of portions (a) of the Septuagint version of the Old Testament, and (b) of the New Testament. The emphasis will be upon the literary and linguistic sides.

Fall term, three hours a week; 3 credits.

31. Greek Literature in English Translations.

Lectures, readings from standard translations, historical and critical studies in the development of literary types, the influence of Greek upon modern literature, etc.

Open to students in all courses. Fall term, three hours a week; 3 credits.

35. Greek Governmental Systems.

A study of forms of government among the Greeks, from the Homeric monarchy to the late federal systems, with especial reference to the development and character of the Athenian Democracy.

Open to students in all courses. Spring term, two hours a week; 2 credits. (This course is identical with History 12.)

41-42. Elementary Greek.

Grammar, translation and composition.

Elective; may be taken as a third language in Arts. Two terms, three hours a week; 6 credits.

43-44. Second Year.

Readings in Xenophon, Homer and the Lyric Poets.

Prerequisite: Greek 41-42. Fall and spring terms, three hours a week; 3 credits each term.

LATIN

*1-2. Vergil.

Four or five books of the *Aeneid,* with study of Latin prosody; prose composition, with suitable grammatical lessons. In the second term, sight reading in the *Metamorphoses* of Ovid.

Prescribed for students in Arts; two terms, four hours a week; 7 credits.

*3. Cicero or Livy, and Satires of Horace.

About half of the term is devoted to the reading of either an essay of Cicero—the *De Senectute* or the *De Amicitia*—or selections from Livy's history. In the remainder of the term some of the more familiar of Horace's *Satires* are read as an introduction to his work.

Prescribed for students in Arts. Four hours a week; 3½ credits.

***4. Horace: Lyric Poetry and Epistles.**

About two-thirds of the term are given to the *Odes;* in the remaining weeks one or two of the *Epodes* and some of the *Epistles* are read.

Prescribed for students in Arts. Four hours a week; 3½ credits.

11. Latin Comedy: Plautus.

A detailed study of the *Captivi* or *Trinummus,* followed by the rapid reading of the *Rudens* and one other play. Especial attention is paid to the peculiarities of colloquial Latin and the relation of Plautus' plots both to his Greek originals and to the types of modern comedy.

Prerequisite: Latin 4. Fall term, three hours a week; 3 credits.

12. Latin Comedy: Terence.

The Heauton Timorumenos, Andria, Adelphoe, and *Phormio.* Particular study is given to Terence's character delineation and to his literary influence upon later writers.

Prerequisite: Latin 4. Spring term, three hours a week; 3 credits.

13. Latin Lyric and Elegiac Poetry.

Selected readings from Catullus, Propertius, Tibullus, and Ovid. The chief subject of the course is Catullus as the poet of impassioned lyric. Students will be expected to seek parallels in other literatures, and Roman life in the period of the authors read will be studied in connection with the text.

Prerequisite: Latin 4. Spring term, three hours a week; 3 credits.

14. Roman Satire.

The course is principally devoted to the Satires of Juvenal, considering not only their literary character but also their relation to the society whose faults Juvenal attacked and his influence upon later authors.

Prerequisite: Latin 4. Fall term, three hours a week; 3 credits.

15. The Latin Historians.

An introductory study of the development of Roman historical literature with illustrations from the *Historicorum Romanorum Fragmenta* and from Sallust and Livy, and the reading of a book of Tacitus' *Annals.* Collateral topics on the monuments of ancient Rome.

Prerequisite: Latin 4. Spring term, three hours a week; 3 credits.

16. Roman Philosophy.

One of Cicero's philosophical works, the *De Natura Deorum, Academica,* or *Tusculan Disputations;* or selected essays of Seneca, with studies of Roman Stoicism and social problems under the imperial tyranny.

Prerequisite: Latin 4. Fall term, three hours a week; 3 credits.

31. Advanced Latin Prose Composition.

A practical course in the writing of continuous passages of Latin prose, accompanied by a review of Latin forms and syntax; especially for students intending to become teachers of Latin.

Prerequisite: Latin 4. One hour a week; 1 credit.

33. An Introduction to Linguistics.

A general introduction to linguistic science, including phonetics and the causes of change in language, followed by an application of the laws involved to word-formation in Latin.

Prerequisite: Latin 4. One hour a week; 1 credit.

***35. Roman Institutions.**

The course will deal historically and topically with Roman life and culture and the organization of the state: the family, religion, politics, the army, economics and finance, business and professional life, education, art, amusements, the influence of Roman civilization upon the mediaeval and modern world, etc.

Lectures, assigned readings, discussions and papers by members of the class.

Open to students of all courses. Fall term, three hours a week; 3 credits. (This course is identical with History 15.)

36. Roman Law.

Lectures on Public and Private Law, with chief stress upon the latter. Readings in the *Institutes* of Gaius and Justinian (Robinson's Selections), and constant reference to Sohm's *Institutes of Roman Law.* Topics assigned to students for reports.

Prerequisite: at least two years of Latin. Spring term, three hours a week; 3 credits. (This course is identical with Government 17.)

41-42. Elementary Latin.

Grammar, translation, and composition.

Elective for students in Science or Social Science. Two terms, three hours a week; 6 credits.

The following are special courses intended for candidates for the Arts degree who have presented less than two years of Latin for entrance.

51. Elementary Latin.

Five hours a week; 5 credits.

52. Caesar.

Five hours a week; 5 credits.

53. Cicero.

Five hours a week; 5 credits.

54. Vergil.

Five hours a week; 5 credits.

ECONOMICS

†*1. Elements of Economics. *Professor Robinson and Staff.*

An introductory course in the principles underlying the production, the distribution and the consumption of wealth. One lecture is given each week. The other two hours are devoted to recitation and discussion. Text, recitations and discussions.

Prescribed for all students; three hours a week; 3 credits.

†*2. Evolution of Industry. *Professor Robinson and Staff.*

A study of human progress from the earliest times in getting a living from nature. The evolution of methods of producing goods to gratify the ever-expanding needs of developing civilization are treated. Stress is placed upon industrial England prior to the nineteenth century, but most of the work of the term deals with the industrial history of the United States in its extensive and intensive aspects, in matters of technical development and of social and industrial organization.

Prescribed for Social Science students; elective for others; three hours a week; 3 credits.

11. Problems in Political Economy. *Professor Robinson.*

This course deals with great national economic problems, for the purpose of indicating solutions in accordance with economic principles. Particular attention is paid to the problems of conservation, taxation, tariff, trusts and transportation. Lectures, readings, reports and discussions.

Prerequisite: Economics 1. Fall term, three hours a week; 3 credits.

***12. Resources and Industries of the United States.** *Dr. MacClintock.*

A study of the economic geography of the United States, with a survey of its natural resources, topography, and trade routes; followed by an analysis of the various industries, extractive, manufacturing, and transporting. Typical industries are taken up in order that the student may follow raw materials through their various processes until they are marketed as finished products. Use is made of the information available from federal bureaus, commissions, and courts, together with special reports and those of various chambers of commerce and private concerns. Lectures, reports, collateral readings.

Elective, but prerequisite for all courses of study in the School of Business and Civic Administration. Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

13. Labor and Employment Problems. *Mr. Albrecht.*

A study of the general principles of collective bargaining, labor legislation, wage systems, labor turnover, job analysis and placement methods. Lectures, discussion, required readings, and reports on observations by students.

Prerequisite: Economics 1. Spring term, three hours a week; 3 credits.

†*20. **Money and Banking.** *Mr. Byers and Dr. MacClintock.*

This course develops the origin and uses of money, the laws of money, the history of coin and paper money, the problems of rising prices, bimetallism and gold exchange, the history and the principles of banking and the problems of banking reforms. Especial attention is given throughout to money and banking conditions in the United States. Lectures, required readings, text.

Elective, but prerequisite for all courses of study in the School of Business and Civic Administration. Co-requisite: Economics 1. Three hours a week; 3 credits.

25. Public and Municipal Finance.

A study of the principles and of the efficient machinery involved in getting public revenues, making public expenditures and dealing with public debts. Emphasis will be put upon the systems of finance in New York City and New York State. Text, lectures, reports, required readings.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits. (This course is identical with Government 25.)

***65. Insurance.** *Professor Brett.*

A brief history of the development of the marine, fire, casualty, surety and life insurance companies. The fundamental principles and theory of insurance. Functions of each kind of insurance. Kinds of companies and associations; the organization, requirements and opportunities of entering the employment of some of their departments, such as the actuarial, statistical, auditing and agency departments. Text, lectures and readings.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

***70. Foreign Exchange and the Financing of Foreign Trade.** *Professor Snider or Professor Brett.*

A brief analysis of the various items of debt one country incurs with another and the methods of settlement. Causes and meaning of fluctuations in rates of exchange. Methods of buying and selling exchange; cable transfers; bills of exchange; letters of credit; arbitrage transactions, etc. The computations involved. Text, lectures and problems.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

†*130-†*131. Accounting I: Theory, Practice and Problems.
Offered in the School of Business and Civic Administration; may be counted without restriction in the College of Liberal Arts and Science; for description, see p. 169.

***150. Business Organization.**
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 166.

155. Advertising.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 166.

156. Marketing Methods and Salesmanship.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 166.

173. South American Markets.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 166.

175. Business Methods in Foreign Trade: Marketing.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 167.

176. Business Methods in Foreign Trade: Technique.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 167.

†*190. Introduction to Business Law: Contracts.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 168.

†*191. Sales, Agency, Partnership, Insurance.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 168.

†*192. Corporations, Negotiable Instruments, Equity.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 168.

†*230-†231. Accounting II: Theory, Practice, and Problems.
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 169.

***250. Business Management.**
Offered in the School of Business and Civic Administration; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 167.

EDUCATION

All the work in this department is elective. The aims are:

(1) To contribute to a truly liberal culture by a study of the educational history of the race and the underlying forces that make for a higher civilization.

(2) To provide the future citizen with a knowledge of sound principles of school administration and management.

(3) To provide those who intend to make teaching their profession with adequate training in the principles and methods of teaching.

To become eligible for the College Graduate Professional Certificate of the New York State Educational Department, it is necessary to complete Philosophy 5 and the courses in Education numbered 11, 121, 31, 151. *These courses should be elected in this order.*

The same courses are also requisite in order to become eligible for the City Superintendent's examination for license to teach in the elementary schools. Students who complete Education 161 and 162 will be exempt from examinations in music and drawing given by the Board of Education. Students are urged to take these courses as early in their professional training as possible.

To secure the recommendation of the Department for license to teach in the High Schools it is necessary to complete Course 152 in addition to the courses required for eligibility for license to teach in the elementary schools.

†*11. The History of Culture and Education.
Professor Duggan and Mr. Egbert Turner.

This course describes the system of education by which the principal culture nations of the world have attempted to realize their social ideals and criticises educational theories and practices from the standpoint of those educational principles now accepted as sound. The work is conducted by means of recitations, assigned readings and the writing of themes. Open to all students above the freshman class. Text-book: Duggan, *A Student's Text Book in the History of Education.*

Three hours a week; 3 credits.

12. National Systems of Education. *Professor Duggan.*

This course makes a comparative study of the educational systems of England, France, Germany and the United States to discover the aim, organization, content and method of the fields of elementary, secondary and higher education.

Spring term, three hours a week; 3 credits.

†*31. Philosophy and Principles of Education. *Professor Klapper.*

This course is devoted, first, to a consideration of the general basis of educational doctrine. The important principles contributed to education by biology, physiology, sociology and psychology are considered in determining their practical application and the modern trend of educational thought. This is followed by work designed to serve as a transition from theoretical psychology to the methods of teaching. The aim is to interpret the lessons of psychology in terms of education and to formulate the scientific principles for a sound pedagogy. The work is conducted as in Course 11.

Prerequisite: Education 121. One term, three hours a week; 3 credits.

32. Social Factors in Education. *Professor Klapper.*

This course studies the social factors and forces which operate to produce the greatest social efficiency of the individual. The scope of education is here made synonymous, not with the school, but with all other factors of the environment.

The course treats of such educational problems as vocational education; moral training; the delinquent; the reformatory, its methods and limitations; social agents in education, such as the settlement; the social work of the school, such as the club, etc.

The work of students consists of visits to various institutions, theses, reports, assigned readings and class discussions.

Spring term, three hours a week; 3 credits.
The course is identical with Sociology 70. Sociology 5 is prerequisite, if this course is to be counted in the department of Government and Sociology.

†*121. Educational Psychology. *Professor Heckman.*

The course is devoted to the study of the following topics:

(a) Child nature, including inheritance of traits, native equipment, characteristics of instincts, variation of capacities and interests, physical growth and its relation to mental development, moral development, exceptional types of children, measurement of mental equipment;

(b) The psychology of learning, including an analysis of the general methods of learning, the nature of the various mental processes involved, the effects of sensory defects, rate and progress of learning, relation of age and individual capacity to learning, relation of interest and motivation to learning, and the value of right methods of study;

(c) The psychology of the school subjects, comprising a brief analysis of the types of learning involved in the various school subjects, as in reading, spelling, writing and arithmetic. The work of the course is illustrated as much as possible by observation of

children, by demonstrations and experiments. In addition to the recitations there are assigned reference readings on which written reports are made.

Prerequisite: Philosophy 5. Three hours a week; 3 credits. This course is identical with Philosophy 171, and may count in either Philosophy or Education.

141. School Management and Administration. *Professor White.*

This course treats of the organization, administration, and supervision of schools and the school system. It considers the methods and processes by which school authority is expressed in national, in state, and in local administrative divisions. The emphasis is upon the administration of city school systems and the management of their schools. The work is conducted as in Course 11.. In addition, students must visit schools for purposes of observation and report.

Prerequisite: Education 11, 121 and 31. Fall term, three hours a week, 3 credits; restricted.

***151. Methods of Teaching and Class Management.** *Professor Klapper.*

A survey of the problems of general method, of the conduct of the recitation and the principles of class management. Special emphasis is laid upon methods of teaching each of the elementary school subjects. In addition, time is devoted to practice work by the students under the supervision and criticism of the instructor. Students are required to observe a minimum of twenty hours in the public schools. The work is conducted as in Course 11.

Prerequisite: Education 11, 121 and 31. Five hours a week; 3 credits; restricted.

152. Secondary Teaching. *Professor White.*

The course is designed to prepare students to teach in the high schools. It will be limited to students in the senior class, each of whom must present a certificate from the department head of the subject he wishes to teach, testifying to his personality and scholarship. The student studies the psychology of the adolescent, and the principles and methods applicable to teaching in the secondary schools. He then applies these principles and methods in practice teaching in Townsend Harris Hall. The work in the class-room is conducted by lectures, quizzes and discussions on assigned reading in standard texts. In addition, students must visit other high schools for the purpose of observation.

Co-requisite: Education 151. Three hours a week; 3 credits; restricted.

161. Methods in Teaching Music. *Professor Baldwin.*

The object is to prepare the student in the theoretical, practical and pedagogical phases of the work and thus qualify him to teach music in the elementary schools.

Two hours a week; 1 credit; restricted.

162. Methods of Teaching Drawing. *Professor Hunt.*

This course is designed for those who would teach drawing in the elementary schools. It is divided into three parts, dealing respectively with representative drawing, with decorative design, and with working drawings and patterns. The art-principles are studied both theoretically and in practice periods, the student's work is criticised, and the modes of presentation, illustration and drill in class, are fully discussed.

Two hours a week; 1 credit; restricted.

181. Education of Exceptional Children.

Professor Heckman.

The course treats of the pyschology of backward, neurotic and mentally deficient children; the relations of physical condition to mentality; the causes of defectiveness; the underlying principles of education and treatment of exceptional children. The course includes also a study of the methods of identifying children who are variants from the normal, whether they are below or above the standards of normality.

In conjunction with the lectures and collateral readings, practical demonstration is given whenever possible.

Prerequisite: Education 121. Three hours a week; 3 credits; restricted. This course is identical with Philosophy 172, and may count in either Philosophy or Education.

196. Educational Seminar. *The Department Staff.*

The study of important educational problems from educational records and through examination of actual conditions in the New York City school system. It is proposed to take problems which are now confronting the Board of Superintendents and the Department of Reference and Research, and to use these as laboratory material for specially selected students who have shown their worth in the other courses in Education.

Fall term, three hours a week; 3 credits; restricted.

ENGINEERING

CIVIL ENGINEERING

†*CE 101. Theory of Surveying.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 152.

***CE 202. Practical Surveying** (First Summer Camp).

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 152.

***CE 110. Materials of Construction.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 153.

***CE 111. Mechanics of Materials.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 153.

***CE 120. Hydraulics.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 153.

***CE 221. Hydraulics, Laboratory.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 154.

ELECTRICAL ENGINEERING

***EE 120. Elementary Electrical Engineering.**

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 156.

***EE 122. Electrical Measurements.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 156.

***EE 124. Alternating Currents.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 156.

EE 136, 146. Radio Engineering.

Offered in the School of Technology; may be counted as restricted courses in the College of Liberal Arts and Science; for description, see p. 157. (Not given in 1920-21.)

MECHANICAL ENGINEERING

†ME 210. Forge and Foundry Laboratory.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 158.

***ME 211. Mechanical Instrument Laboratory.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 158.

†ME 220. Pattern Making.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 159.

ME 221. Steam Power.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 159.

†*ME 122. Power.

Offered in the School of Technology; may be counted, without restriction, in the College of Liberal Arts and Science; for description, see p. 159.

ME 124. Kinematics.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 159.

***ME 230. Machine Tool Laboratory.**

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 159.

ME 231. Steam Power Laboratory.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 159.

ENGLISH LANGUAGE AND LITERATURE

†*1. Rhetoric. *Professor Stair and others.*

Paragraph and essay writing. A laboratory course, consisting of written work done in class without home preparation, and with discussion and explanation of the principles involved. Frequent personal conferences with the instructor will require extra time from the student. Credit for the course will not be given until a student can write grammatically and spell correctly. Text-book: Woolley's *Handbook of Composition.*

Prescribed; two hours a week; 1 credit.

†*2. Rhetoric. *Professor Stair and others.*

A continuation of Course 1, with more stress upon the larger forms of composition, and practical methods of self-expression. This is the last prescribed composition course in the College, and credit for it will not be given until a student has learned to express himself in writing with both ease and accuracy.

Prescribed; two hours a week; 1 credit.
Prerequisite: English 1.

†*3. The History of English Literature.
Professor Grendon and others.

Collateral reading required. Essays are also written and corrected in personal conference with the instructors. Text-books: Moody and Lovett's *First View of English Literature,* Pancoast's *Standard English Poems and Standard English Prose.*

Prescribed; four hours a week; 4 credits.

11. Diction and Grammar. *Professor E. F. Palmer.*

The aim is partly to enlarge the student's vocabulary and give him a sense of the finer distinctions between words, and partly to guide him to the rhetorical effect of the order and arrangement of words in sentences. Some attention is also given to the history of the language, and to literary thought. Frequent written exercises are required. Text-books: West's *English Grammar,* Roe's *English Prose.*

Prerequisite: English 1 and 2. Cannot be taken at the same time as English 12 or 13. Two hours a week; 2 credits.

12. Advanced Composition. *Professor Whiteside.*

This course serves as a continuation of Courses 2 and 11. It is intended for students who wish to specialize in journalism or

other modern forms of composition. The exercises include the writing and criticizing of editorials, reviews, and essays.

Prerequisite: English 1 and 2. Cannot be taken at the same time as English 11 or 13. Two hours a week; 2 credits.

13. Syntax and Style. *Professor Mott.*

A study of present English usage. Text-books: Onion's *Advanced English Syntax* and Barnett and Dale's *Anthology of Modern English Prose.*

Prerequisite: English 1 and 2. Cannot be taken at the same time as English 11 or 12. Two hours a week; 2 credits.

21. Shakespeare's Histories. *Professor Mott.*

All the histories will be read, together with Marlowe's *Edward II.*

Prerequisite: English 1 and 3. Fall term in alternate years (to be given 1920); three hours a week; 3 credits.

***22. Shakespeare's Comedies.** *Professor Mott.*

All the comedies will be read, together with Jonson's *Every-man in His Humor.*

Prerequisite: English 1 and 3. Fall term in alternate years (to be given 1921); three hours a week; 3 credits.

***23. Shakespeare's Tragedies.** *Professor Mott.*

All the tragedies will be read, together with Marlowe's *Faustus* and Kyd's *Spanish Tragedy.*

Prerequisite: English 1 and 3. Spring term, three hours a week; 3 credits.

24. English Poetry. *Professor Mott.*

The Renaissance and the classic influences; a study of epic romance, epic, classic drama, satire and epistle. Text-books: selections from the works of Spenser, Milton and Pope.

Prerequisite: English 1 and 3. Fall term, two hours a week; 2 credits.

25. English Poetry of the XIXth Century. *Professor Mott.*

Text-book: Ward's *English Poets,* Vol. IV.

Prerequisite: English 1 and 3. Spring term, two hours a week; 2 credits.

***26. English Prose to the End of the XVIIIth Century.** *Professor Krowl.*

The work of this course is divided into three parts: (1) lectures, recitations and reports, intended to familiarize the student with the history of prose and its relation to contemporary social and political movements; (2) private reading of a considerable amount of prose literature; (3) occasional themes, designed to give the student practice in composition.

Prerequisite: English 1 and 3. Two hours a week; 2 credits.

***27. English and American Prose of the XIXth Century.** *Professor Krowl.*

The work is divided as in 26.

Prerequisite: English 1 and 3. Two hours a week; 2 credits.

28. The Development of Fiction. *Professor Horne.*

The progress of fiction and man's development as shown in fiction are traced from antiquity to the evolution of modern society and the modern novel. Text-books: Horne's *Technique of the Novel,* and a selected series of works, covering the masterpieces of early fiction.

Prerequisite: English 1 and 3. Fall term, two hours a week; 2 credits.

29. The Novel of the XIXth Century. *Professor Horne.*

Text-books: Horne's *Technique of the Novel,* and a selected series of great novels both English and foreign.

Prerequisite: English 1 and 3. Spring term, two hours a week; 2 credits. Applicants for this course who have not taken English 28, must consult Professor Horne and do some preparatory work.

***30. American Literature.** *Professor Otis.*

The relation of American literature to the national life and thought. An attempt will be made to discover the distinctly American elements. Its relation to British literature will be noted.

Colonial literature; the literature of the Revolution; the New England group; the literature of the Civil War; the literature of the South; Western writers; present tendencies in American literature.

Outside reading, conferences and written reports will be required.

Prerequisite: English 1 and 3. Two hours a week; 2 credits.

31. Social and Ethical Forces in English Literature in the XVIIIth and XIXth Centuries. *Professor Compton.*

The relation of English Literature to national life and thought. A course dealing with the content rather than the form of books, pointing out the ideas and ideals to which the English speaking peoples have given voice during the past two centuries. Considerable outside reading will be required.

Prerequisite: English 1 and 3. Fall term, two hours a week; 2 credits.

32. Contemporary Literature of the English-Speaking Peoples. *Professor Coleman.*

This course is to some extent a continuation of 31, but may also be taken by students who have earned a good standing in Course 3. The course deals with the various literary forms of the last quarter century, with the authors themselves and with

their thoughts and teachings. It is mainly a lecture course given by various members of the English Department. Considerable outside reading will be required.

Prerequisite: English 1 and 3. Spring term, two hours a week; 2 credits.

41-42. Comparative Literature and Art.

LITERATURE *Professors Crowne and others.*

An introductory view of some of the great European writers, ancient, medieval, and modern; their backgrounds and ideals; their place in literary evolution; the relation to the culture of to-day. Lectures, readings, and reports. Some of the lectures will be given by members of the various language departments.

ART *Professor Hunt.*

The philosophy and social significance of the fine arts, architecture, sculpture, and painting; art appreciation; historical outline; lantern slides and other material; visits to the Metropolitan Museum.

Prerequisite: English 3 and one year of college work in a foreign language.

Either English 41-42 or a third language is prescribed for students in Arts; elective for others. 41 and 42 constitute a year's course beginning in the fall, but in special cases students may receive credit for either term without the other.

Two lectures and one recitation a week; 3 credits each term.

GEOLOGY

The Department of Geology is fairly well equipped with journals, books, working specimens, apparatus and a museum for reference and special work.

While no course in this department is strictly prerequisite for another, the student is advised to take the courses in sequence.

No student should elect anthropology who has not had a good training in human anatomy and physiology.

†*1. Elementary Geology. *Mr. Butler.*

An introductory course dealing with the materials of which the earth is formed and their arrangement, the processes and agents which have been and are at work in bringing about changes in the earth's crust. The laboratory work consists of the study of the more common rocks, topography and map interpretation with field work.

Prescribed for students in Science; elective for others. One lecture, one recitation and two laboratory hours a week; 3 credits.

12. Mineralogy. *Professor Sickels.*

This includes the study of the physical and chemical properties of minerals, and their determination by means of blow-pipe analysis. Reference: Dana.

Two lectures and two laboratory hours a week; 3 credits.

13. Crystallography. *Professor Sickels.*

This course treats of the geometric forms of minerals, their measurement and the laws which govern crystallization, together with the study of the different systems of crystals.

Spring term; two lectures and two laboratory hours a week; 3 credits.

24. Paleontology. *Professor Sickels.*

A study of fossil plants and animals with particular reference to evolution. Texts: Zittell and Dana.

Spring term; two lectures and three laboratory hours a week; 3 credits.

25. Historical Geology. *Professor Sickels.*

This course continues the work of Geology 1 and deals with the stratigraphic history of the earth. Laboratory work will include the making of maps and field trips to points of interest in and near the city. Text: Cleland.

Fall term; two recitations and three laboratory hours a week; 3 credits.

26. Economic Geology. *Mr. Butler.*

A study of the origin, areas of deposit, the mining and uses of commercial minerals and rocks. Text: Ries.

Fall term; two recitations and two laboratory hours a week; 3 credits.

31. Anthropology. *Professor Sickels.*

This course deals with the natural history of man, his comparison with the lower animals, apes and primitive man, his structure, racial variations, his origin, development and distribution. References: Duckworth, Brinton and Osborn.

Spring term; two lectures a week; 2 credits.

The biological and geological departments have a combined library in Room 316, which is open daily to students. The Steers and Warburg funds aid materially in the acquisition of books and journals. During the year 1919 one hundred and forty-one volumes were added, bringing the total number in the library to 1,502, exclusive of many government publications. The library receives thirty-one journals.

The museum of the departments of Geology and Biology contain many thousand specimens, named, arranged and classified for reference and study. The greater part of the collections is in the large room 300. Among recent additions are the gift of a valuable collection of meteorites, in the Lincoln Corridor, and the set of McGregor reproductions of prehistoric men.

In 1917, an alumnus, in addition to other valuable gifts, donated a fund of five thousand dollars, the income of which is to be expended for the department of Geology.

GERMAN

Courses 1-4 are prescribed for students in Arts who have chosen German as their second language.

Students in Science who have selected German to meet their requirement of one year of language study may take either Courses 1 and 2 or Courses 7 and 8 if they have presented two units of German for admission to College. If they have presented three units, they will take Courses 3 and 4. Students in Social Science will take Courses 1 and 2 or Courses 3 and 4 according as they have presented two units or three for admission.

1. Intermediate.

Schiller's *Wilhelm Tell,* Harris' *Composition,* Part III, and Schurz's *Lebenserinnerungen.* The last named is read at sight one hour each week, and for this hour no preparation is required.

Four hours a week; 2½ credits.

2. Intermediate (Continued).

A prose text: Freytag's *Aus dem Staate Friedrichs des Grossen;* Harris' *Composition,* Part IV, and Schurz's *Lebenserinnerungen* at sight, as under German 1.

Four hours a week; 2½ credits.

3. Advanced.

Schiller's *Wallenstein* and composition.

Four hours a week; 2½ credits.

4. Advanced (Continued).

Goethe's *Iphigenie* or *Torquato Tasso,* and Hebbel's *Agnes Bernauer,* with sight reading from Goethe's autobiography and Klenze's *Deutsche Gedichte.*

Four hours a week; 2½ credits.

7-8. Intermediate.

Scientific German and Composition. Scholz's *Scientific German Reader.* Schurz's *Lebenserinnerungen* at sight, as under German 1 and 2.

Two terms, four hours a week; 5 credits.

11. Comedy.

Historical survey of its earliest traces; indebtedness to the ancients, Shakespeare, the commedia dell' arte, and Molière. Critical study of German type-comedies from all periods, includ-

ing such authors as Hans Sachs, Lessing, Kleist, Grillparzer, Anzengruber, Gerhart Hauptmann. Lectures, collateral reading, reports.

Prerequisite: German 4. Fall term, three hours a week; 2 credits. (Omitted in 1920.)

12. Goethe's Faust. *Professor von Klenze.*

This course may be considered as a direct sequel to German 4 and as a preparation for any work to be done in the literature of the 19th Century. Part I read, Part II discussed. Lectures and reports.

Prerequisite: German 4. Spring term, three hours a week; 2 credits.

13. History of German Literature, from the Earliest Times to the Classical Period. *Professor von Klenze.*

This course is necessary for anyone who wishes to teach German, and who must, therefore, be acquainted with the ancient literary forms of which the modern forms are the successors. Francke's *Die Kulturwerte der deutschen Literatur,* Thomas' *German Anthology.* Lectures and reports.

Prerequisite: German 4 Spring term in alternate years; three hours a week; 2 credits. (Omitted in 1921.)

14. The Classical Period of German Literature.

Professor Kost.

A study of Goethe and Schiller, together with their immediate forerunners and contemporaries, to which is added a consideration of the Romantic School. A reading of suitable texts and commentaries will be required.

Prerequisite: German 4. Fall term, three hours a week; 2 credits.

15. German Literature since Goethe's Death.

Professor von Klenze.

A study, in lectures and prescribed readings, of the main currents in German literature since 1832. Text-book: Kummer's *Deutsche Literaturgeschichte des neunzehnten Jahrhunderts.*

Prerequisite: German 4. Spring term, three hours a week; 2 credits.

16. The German Short-story. *Professor von Klenze.*

The evolution of the short-story ("Novelle") forms one of the most important factors in the history of German nineteenth century literature. This course gives opportunity for a study of the chief narrative works of Kleist, Heyse, Storm, Keller, Meyer, Schnitzler. Discussion of texts, lectures and reports.

Prerequisite: German 4. Fall term in alternate years, three hours a week; 2 credits. (Omitted in 1920.)

17. The German Drama of the Nineteenth and Twentieth Centuries. *Professor von Klenze.*

For a critical appreciation of contemporaneous drama, acquaintance with the main German representatives of nineteenth and twentieth centuries dramatic literature is essential. Characteristic plays by Kleist, Grillparzer, Hebbel, Anzengruber, Wagner, Hauptmann, Sudermann, Schnitzler and Wedekind, are read or discussed. Lectures and reports.

Prerequisite: German 4. Spring term in alternate years; three hours a week; 2 credits. (Omitted in 1921.)

21. Advanced Scientific German. *Dr. Kinkeldey.*

Includes difficult science readings, composition, and the translation of an English scientific text.

Prerequisite: German 8. Spring term in alternate years; three hours a week; 2 credits. (Omitted in 1921.)

22. Historical and Administrative German.

Includes a reading of official documents, and of a work on municipal government.

Prerequisite: German 2 or 8. Fall term in alternate years; two hours a week; 1 credit. (Omitted in 1920.)

31. Advanced German Composition. *Professor Kost.*

Original German compositions and translations of selections from important English and American authors.

Prerequisite: German 2 or 8. Fall term, two hours a week; 1 credit.

32. Advanced German Composition (Continued). *Professor Kost.*

Whitney and Stroebe's *Advanced German Composition.* Essays in German.

Prerequisite: German 31. Spring term; two hours a week; 1 credit.

33. Advanced German Grammar. *Professor von Klenze.*

This course includes present usage, history of the language, and phonetics; methods of teaching for those who wish to teach German.

Prerequisite: German 4. Fall term in alternate years; three hours a week; 2 credits. (Omitted in 1920.)

34. History of the German Language.

Presents the evolution of the Germanic dialects from the Pre-Germanic, as well as the establishment of a literary language on the dialect foundation. Grimm's Law and Verner's Law receive full treatment, and the student makes use of Victor Henry's *Grammaire comparée de l'anglais et l'allemand* and Streitberg's *Urgermanische Grammatik.*

Prerequisite: German 4. Spring term in alternate years; three hours a week; 2 credits. (Omitted in 1921.)

41-42. Elementary.

Pronunciation, essentials of grammar, elementary phraseology, reading and translation. Whitney and Stroebe's *A Brief Course in German,* and Hillern's *Höher als die Kirche.*

Elective; may be taken as a third language in Arts. Two terms, three hours a week; 2 credits each term.

43. Narrative Prose.

Gerstäcker's *Germelshausen* and Schurz's *Lebenserinnerungen* or other similar texts.

Prerequisite: German 41-42. Spring term, three hours a week; 2 credits.

44. Poetic Text.

Schiller's *Wilhelm Tell.* Harris' *Composition,* Part III.

Prerequisite: German 43. Fall term, three hours a week; 2 credits.

Courses 51-54 *are special courses for students who have been admitted to College with less than the required preparation in languages.*

51. Elementary German.

A course for beginners; intended to be the equivalent of a year of high school work.

Five hours a week.

53. Second Year German.

Three hours a week.

54. Second Year German (Continued).

Three hours a week.

111-112. Commercial German.

Offered in the School of Business and Civic Administration; may be counted as restricted courses in the College of Liberal Arts and Science; for description, see p. 174.

GOVERNMENT AND SOCIOLOGY

GOVERNMENT AND LAW

†*1. American Government and Citizenship. *Professor Guthrie.*

This course is based upon an analysis of the Constitution of the United States and follows that organic law in all its manifestations and functionings as an instrument of organization of land, people, government and liberty. The various organs of government will be studied as they reflect public opinion and enforce the collective will. The course treats such subjects as the political population, naturalization, enfranchisement, party organization, primaries, initiative, referendum, recall, organization of the will of the states in legislatures and executive departments, the courts, diplomatic agencies, and the citizen at home and abroad.

Prescribed for all students. One lecture and two recitations a week; 3 credits.

11. American Constitutional Law. *Professor Guthrie.*

An interpretative study of the Constitution of the United States in the light of the actual workings of the governmental system. Text, lectures, discussions and case reports.

Fall term, three hours a week; 3 credits.

12. International Law. *Professor Guthrie.*

A study of the rules controlling the relations between nations. Text, recitations, discussions and case reports.

Spring term, three hours a week; 3 credits.

13. Political Theory. *Professor Guthrie.*

This course outlines the evolution of the State and presents historic and present political theories. American political theory is emphasized. Texts, lectures, recitations and student reports.

Fall term, three hours a week; 3 credits.

14. Comparative Government. *Professor Guthrie.*

This course outlines the chief foreign governmental systems and studies the systems of governing colonies and dependencies. Lectures, text, recitations and reports by the students.

Spring term, three hours a week; 3 credits.

***15. State Legislation and Administration.**

Professor Guthrie.

This course treats law making and law administration in American states, especial attention being given to New York State. Various local executives of state law will be studied at close range. Detailed attention will be given to the powers and duties in New York State of state assemblymen and senators and executive officers and to the daily workings of the Assembly, the Senate and the Executive departments. Disputed areas of legislative and executive competency will be studied through leading cases in the Court of Appeals. Lectures, readings, reports and field trips to government bureaus and agencies, discussions.

Fall term, 1921, three hours a week; 3 credits.

***16. Administrative Law in the United States.**

Professor Guthrie.

This course covers the distribution of power between city, state and nation; the distribution of authority among departments of government; the means whereby administrative officers enforce the laws and the forms of remedy and redress of the citizen against the abuse of public power. It treats of the nature and liability of public corporations as cities, counties and towns, their power to borrow and their obligations under contract. It discusses the means whereby public officers collect taxes levied in the various taxing districts.

Spring term, 1921, three hours a week; 3 credits.

17. Roman Law.

This course is identical with Latin 36; see page 84 for description.

Prerequisite: at least two years of Latin. Spring term; three hours a week; 3 credits.

21. City Efficiency.

Making a city the best place in which to live and to work and an effective aid in individual advancement. The physical plant of a city; city planning and building; districting; terminals; street and park systems; residential areas. Social environment, conditions of living, physical, intellectual and social; health, recreation and welfare; community organizations and clubs. Governmental efficiency; the application of modern business methods in the work of city departments; organization, administrative, accounting, operative, material and personal efficiency practice in the principal phases of city's work. Assigned readings, lectures, reports and practical problems.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

22. Community Promotion.

The application of modern methods of business development to the massed industry of the community. Scientific location; industrial city planning; industrial surveys; eliminating business wastes; business betterments; extending present enterprise; securing new industries; community influence; publicity community industrial organizations; plan and organization; finance; membership work; community education; committee system.

Assigned readings, lectures, reports and practical work.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

***23. Municipal Administration.** *Professor Guthrie.*

A study of the organs of city administration with special attention to the City of New York. The powers and the duties of all officials of New York City, of the Board of Estimate, of the Board of Aldermen and of the various city departments will be treated in some detail. Concrete illustrative material will be used and visits will be made to Board sessions and to departmental headquarters. Such problems as "home rule," "commission government," and "city managers" will be treated. The experiences of leading cities of the United States and in foreign countries will be used to test the value of New York City's institutions. Lectures, readings, discussions and field trips to city departments and bureaus.

Fall term, 1920, three hours a week; 3 credits.

25. Public and Municipal Finance.

This course is identical with Economics 25. (See p. 86.)

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

SOCIOLOGY AND STATISTICS

†*5. Elements of Sociology.

This course offers an introduction to the study of society. It treats of the origin and development of human institutions, of the principles of organization and the motives of group action. The laws of association, progress and social control are considered; the problems of adjustment, co-operation and uplift are indicated. Lectures, text and discussions.

Prescribed for Social Science students. Three hours a week; 3 credits.

52. Elements of Ethnology.

An introduction to the study of social groups. The characteristics and achievements of the more important races and nations of the world, their customs and civilization. A comparison of the essential social institutions actually in effect to-day. Text books, papers and discussions.

Spring term, three hours a week; 3 credits.

53. Applied Sociology—Philanthropy.

This course presents the facts and causes of poverty, describes methods of public and private relief, discusses the care of defectives, and indicates lines of constructive philanthropy. Special attention is given to the organization and work of local charitable institutions. Required readings, visits, student reports, lectures and discussions.

Prerequisite: Economics 1. Fall term, three hours a week; 3 credits.

54. Applied Sociology—Criminology.

This course deals with the character, causes and treatment of crime. It describes the criminal, his trial and punishment. Especial study is made of local courts, reformatories, and preventive agencies. Required readings, student reports, lectures and discussions.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

56. Public Recreation.

The organization and social function of indoor and outdoor recreation—parks, playgrounds and gymnasia; theatres, concerts and social centers. Physical, mental and moral effects of group play. Examples of public agencies here and abroad. Required readings, papers and discussions.

Spring term, three hours a week; 3 credits.

57. Statistics.

The quantative analysis of social groups. Introductory study of averages, variations and probability. Use of short methods and mechanical devices for calculation. Criticism of data, tabulation and graphic methods. Investigation of problems in demography, vital, administrative, moral and educational statistics. Text, laboratory, reports and discussions.

Prerequisite: Economics 1. Two recitations and two hours laboratory; 3 credits.

58. Applied Statistics—Social Investigation.

The purpose of this course is to acquaint the student with the best methods of obtaining and presenting facts regarding communities and institutions. Model surveys, reports and exhibits are analyzed and discussed. Practical steps in the organization of such work are presented and the students are expected to help plan, conduct and report upon first hand investigation. Assigned reading, field work, lectures and discussions. Open to seniors.

Prerequisite: Sociology 5 and 57. Fall term, two hours seminar, two hours laboratory and two hours field work; 4 credits.

70. Social Factors in Education.

This course is identical with Education 32; see page 89 for description.

Prerequisite, if it is to be counted in this Department, Sociology 5. Spring term, three hours a week; 3 credits.

HISTORY

†*1. Mediaeval and Modern History, to 1648.

Essential factors in the history and development of western Europe from the time of Charlemagne until 1648 are taken up, with special reference to origins, formations and changes—political, social and material. The object of this course is to present a comprehensive view of that formative period without the introduction of masses of detail.

Prescribed; four hours a week; 4 credits.

†*2. European History, 1648-1870.

This course deals with the political, social and economic development of Europe in the seventeenth, eighteenth and early nineteenth centuries. The growth of nationalism and democracy, and the great industrial revolution, with its accompanying social and political results, are emphasized.

Prerequisite: History 1. Prescribed; three hours a week; 3 credits.

†*3. Contemporary European History.

This course deals with the political and social history of Europe from 1870 to 1914. Special attention is paid to the growth of democracy in England and France, the national development of Germany, the Russian Revolution, the expansion of Europe and international relations.

Prerequisite: History 1, 2. Prescribed in Social Science; elective in Arts and Natural Science. Three hours a week; 3 credits.

***4. The United States Since 1876.**

This course passes in rapid review the principal events of United States history—political, economic and social—since 1876. It is intended to furnish a background for more advanced work in modern history or in economic and social problems.

Prerequisite: History 1, 2. Prescribed in Social Science; elective in Arts and Natural Science. Two hours a week; 2 credits.

11. Ancient Civilizations. *Professor Schuyler.*

A general review of Greek and Roman political and civic life. What it was and the survival of its influence to modern times. Forms of government, laws, religions, morals, literature, art, architecture, etc., are considered as factors of different values in the make-up of the old civilizations. By way of comparison the changed or distinctively new factors in the national types of to-day are considered.

Spring term, three hours a week; 3 credits.

12. Greek Governmental Systems. *Professor Brownson.*

This course is identical with Greek 35 and may be counted in either History or Greek. See page 82.

Open to students of all courses. Spring term, two hours a week; 2 credits.

15. Roman Institutions. *Professor Newton.*

This course is identical with Latin 35 and may be counted in either History or Latin. See page 84.

Open to students of all courses. Fall term, three hours a week; 3 credits.

21. English Political and Constitutional History. *Professor T. R. Moore.*

This course deals with the formation of the English Constitution and traces the origin and development of those political institutions which were afterward adopted both in America and Europe. It is intended especially for those students who expect to study law or to specialize in comparative government. Lectures, collateral reading, discussions and essays.

Three hours a week; 3 credits.

25. Problems in Contemporary European History. *Professor Schapiro.*

This course deals with the special problems confronting England, Germany and France at the beginning of the twentieth century. The treatment is topical, not narrative, with special emphasis on social and economic matters.

Three hours a week; 3 credits.

26. The Intellectual History of Europe During the Nineteenth Century. *Professor Schapiro.*

This course traces the development of the political and social ideals of modern Europe. It deals chiefly with the intellectual movement at the end of the eighteenth century, the rise and growth of nationalism and democracy, the theories of the Individualists and Utopians of the early nineteenth century and the theories underlying the various social movements during the latter part of the century.

Open only to seniors. Spring term, three hours a week; 3 credits.

***27. The World War.** *Professor Mead.*

The course outlines the fundamental and immediate causes of the great world conflict of 1914-1918. A study will be made of the economic rivalries, territorial ambitions, and military alliances among the great European powers. The reactions of the war upon the United States and the part which this country played in the great struggle will be emphasized. The course will

conclude with a study of the work of the Peace Conference and the problems of reconstruction.

Three hours a week; 3 credits.

***31. American Colonial and Revolutionary History.**
Professor Mead.

The aim here is to trace the development of the American nation in its earlier periods rather than to deal with details of the history of the individual colonies. Emphasis is laid upon the growth of our governmental forms and special characteristics indicating the influence of European institutions upon those of America. The system of English colonial administration and the conflict of imperial and colonial interests are considered in order to understand the underlying causes of the Revolution and the growth of the spirit of independence and union.

Fall term, three hours a week; 3 credits.

32. Confederation, Union and Consolidation (1781-1828).
Professor Thompson.

The course aims to show the process by which a band of jealous, independent states grew into a union, however imperfect. The Confederation and the Constitution are studied with special reference to the sources of both, and the development of democracy and of the national idea is traced through the early administrations.

Spring term, three hours a week; 3 credits.

33. Division and Reunion (1828-1876). *Professor Mead.*

A study of the conflicting principles of states rights and nationality, centering about the slavery question, followed by a survey of the great war for the preservation of the Union and concluding with an examination of the problems of reconstruction.

Three hours a week; 3 credits.

34. Contemporary American Problems.
Professor Thompson.

Important questions of the present generation are discussed, such as: changes in the government of the United States; the Populist and the Progressive movements; the development of the West and the disappearance of the frontier; industrialism and the growth of cities; immigration and the resulting problems; legislative experiments; the United States as a world power; relations with Latin America; the New South and the negro, North and South, etc.

Three hours a week; 3 credits.

36. Development of the State and City of New York.

Dr. Keep.

The State and City are considered both for their own political and civic life and as types of state and city growth in this country.

After a survey of conditions in Colonial times and of the struggle for self-government, the course enlarges upon the Revolutionary period and the subsequent constitutional changes and political and industrial activities under the new American régime. Attention is also given to interstate relations, local features and movements and various questions that are of interest to the citizens of New York to-day.

Fall term, three hours a week; 3 credits.

***39. Development of the South American States.**

Professor Schuyler.

Beginning with a survey of conditions in Spain during the period from Ferdinand and Isabella to the death of Philip II, the general course of exploration and colony building in South America is taken up, stress being laid upon the essential differences between the Spanish and the English conception of the colony and its relations to the mother country. The most important events in the history of the colonies up to the close of the Revolutions of 1810-1826 are briefly noted, after which a careful study of the development of the more important States is made.

Fall term, three hours a week; 3 credits.

The Historical Museum contains a collection of American aboriginal antiquities, historical relics and rare letters of all periods of our history, numerous rare prints, maps and relics of local interest, reproductions of Roman coins and medallions, a marine camouflage exhibit, and, most notably, a collection of the papers of Townsend Harris, with the first American flag made in Japan at his request in 1858.

HYGIENE

The Department of Hygiene is made up of the divisions of Physical Training, Health Examination, Recreational Instruction, and Athletics.

Through these divisions the Department attempts to influence young men to form individual and community habits of hygiene that will lead to the acquisition and conservation of health and thus better prepare them for the physical demands of citizenship for peace or for war.

This organization gives opportunity for the development of neglected organic and neuromuscular growth, co-ordination and control; for the social, ethical and moral training (character building influences) that come from wisely supervised athletic and recreational experiences; and for the special conditioning that accompanies training for severe physical and physiological competitions and other tests.

Finally, preparation may be secured for life work in various phases of public health, physical training and social work.

In addition, this Department is concerned with all those influences within the College which affect the health of the student. Every reasonable effort is made to keep the institution safe and attractive to the clean, healthy individual.

DIVISION OF PHYSICAL TRAINING

Professors Storey, Woll and Williamson, Dr. Hansen, Mr. McKenzie, Mr. O'Neil, Mr. Reichardt, Mr. McCormick, and Assistants.

1. Course One.

(*a*) Lectures: The agents that injure health.
(*b*) Physical exercise.

i. Graded mass drills.

Two-count movements, designed to give experience in mass formations and to develop obedience, alertness, and ready response to command, accurate execution, good posture and carriage and facility of control.

ii. Apparatus work. Elementary graded exercises for squads of five students each.

iii. Selected, graded, recreative indoor and outdoor games and play.

iv. *Swimming. Each student is required to learn to swim with more than one variety of stroke.

Prescribed for freshmen, first term, three hours a week; 1 credit.

2. Course Two.

(*a*) Lectures: The carriers of disease.
(*b*) Physical Exercise.
i. Graded mass drills. Two-count movements (continued).
ii. Apparatus work. Continuation of graded exercises for squads of five.
iii. Selected, graded, recreative indoor and outdoor games and play.
iv. Swimming. Each student is required to develop endurance in swimming.

Prerequisite: Hygiene 1. Prescribed for freshmen, second term; three hours a week; 1 credit.

3. Course Three.

(*a*) Lectures: The contributory causes and carriers of disease.
(*b*) Physical exercise.
i. Graded mass drills. Four-count movements.
ii. Apparatus work. Continuation of graded exercises for squads of five.
iii. Selected, graded, recreative indoor and outdoor games and play.
iv. Swimming. Diving, rescue and resuscitation of the drowning.

Prerequisite: Hygiene 2. Prescribed for sophomores, first term; three hours a week; 1 credit.

4. Course Four.

(*a*) Lectures: Defenses of health.
(*b*) Physical Exercise.
i. Advanced graded mass drills. Eight-count movements.
ii. Advanced graded apparatus work, for squads of five.
iii. Selected, graded, recreative indoor and outdoor games and play.
iv. Swimming. Advanced continuation of requirements outlined for Courses 2 and 3.

Prerequisite: Hygiene 3. Prescribed for sophomores, second term; three hours a week; 1 credit.

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* All students in the first term in College must learn to swim one hundred feet; if they fail to meet that requirement their continuation in College will be under probation until the requirement is met.

At the end of the second term, all students who are still unable to satisfy the requirement are notified that if they do not meet the requirement before the end of the third term, they will be dropped from the College roll.

Modified Course. *Dr. Lattin.*

In each of the above required courses provision is made for those students whose organic condition may permanently disqualify them for the regular scheduled work. This special work is under the immediate direction of a medical member of the Staff.

111. Intermediate Physical Training.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 161.

112. Advanced Physical Training.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 161.

113. Class Management.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 161.

114. Class Management.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 161.

115. Control of Emergencies and First Aid to the Injured.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 161.

116. Theory and Practice of Individual Instruction in Hygiene and in Department Sanitation.

Offered in the School of Technology; may be counted as a restricted course in the College of Liberal Arts and Science; for description, see p. 161.

DIVISION OF HEALTH EXAMINATION

Professors Storey and Woll, and Doctor Lattin and Staff.

I. Individual Instruction in Hygiene.

This instruction is of a personal confidential character, and is given in the form of advice based upon medical history supplied by the individual, and upon medical and hygienic examinations and inspections of the individual.

(*a*) Medical and hygienic history and examination.

In this relationship with the student the Department attempts to secure such information concerning environment and habit

influences in the life of the student as may be used as a basis for supplying him with helpful advice concerning the organization of his policy of personal health control. The medical examinations are utilized for the purpose of finding remedial physical defects whose proper treatment may add to the physiological efficiency and therefore to the health possibilities of the student.

Prescribed for all students once each term. No credits.

(*b*) Hygiene inspections.

These inspections are applied in the mutual interest of personal, departmental and institutional hygiene.

Prescribed for freshmen and sophomores.

(*c*) Conferences.

All students who have been given personal hygienic or medical advice are required to report in conference by appointment in order that the advice may be followed up.

All individuals found with communicable diseases are debarred from all classes until it is shown in conference that they are receiving proper medical treatment, and that they may return to class attendance with safety to their comrades.

All individuals found with remedial physical or hygienic defects are required to report in conference with evidence that the abnormal condition has been brought to the serious attention of the parent, guardian or family medical or hygienic adviser. Students failing to report as directed may be denied admission to all classes.

II. Medical and Sanitary Supervision.

(*a*) Sanitary supervision.

An advisory Committee on Hygiene and Sanitation, with the Professor of Hygiene as Chairman, has been appointed by the President. This committee has been instructed to "inquire from time to time into all our institutional influences which are likely to affect the health of the student and instructor, and to make such reports and recommendations to the President as may seem wise and expedient."

(*b*) A medical examination is required of all applicants for admission to the College. Approval of the Medical Examiner must be secured before registration is permitted.

(*c*) Medical consultation.

Open to all students. (Optional.)

(*d*) Medical examination of Athletes.

Required of all students before admission to athletic training and repeated at intervals during training season.

(*e*) Treatment.

Emergency treatment is the only treatment attempted by the Department. Such treatment will be applied only for the purpose

of protecting the individual until he can secure the services he selects for that purpose.

(*f*) Conferences. See I (c).

DIVISION OF RECREATIONAL INSTRUCTION

Mr. Reichardt and Assistants.

Liberal provision is made by the College for voluntary recreational activities indoors and outdoors during six days of the week and throughout vacation periods. Emphasis is laid on recreation as a health habit and a means of social training.

DIVISION OF ATHLETICS

(1) Athletic Supervision.

Three organizations are concerned:

(*a*) The Faculty Athletic Committee, which has to do with all athletic activities that involve academic relationships.

Professor Storey, Chairman; Professor Woll, Secretary.

(*b*) The Athletic Council, a committee of the Department of Hygiene, charged with the supervision of all business activities connected with student athletic enterprises.

Professor Storey, Chairman; Professor Williamson, Secretary.

(*c*) The Athletic Association of the student body.

(2) Athletic Instruction.

Mr. McKenzie, Mr. McCormick, Mr. Holman and Assistants.

The Department utilizes various intramural and extramural athletic activities for the purpose of securing a further influence on the promotion of health habits, the development of physical power, and the establishment and maintenance of high standards of sportsmanly conduct on the part of the individual and the group.

At present the schedule includes the following sports: baseball, basket ball, track and field, swimming and water polo, tennis, soccer football, hand ball and wrestling.

The Department of Hygiene accepts certain athletic training under the instructions of the regular teaching force of the Department as an equivalent for a part of the work in the regular courses in physical training.

All students who have achieved a record of "B," or better, for their preceding term's work in the Department, and whose practical work for that term averages 80 or better, and who are

found physically fit, may substitute the full time training in basketball, baseball, soccer football, swimming, track and field, in the regular seasons of those sports, for the required practical work in Courses 3 and 4.

"Full time athletic training" covers a full training period each day, five days a week, under the direction of the departmental instructor in charge of the athletic squad concerned.

Students in Course 2 may offer these substitute equivalents for a part of their practical work, provided they first pass a satisfactory special examination as to their physical fitness, muscular development, muscular control and health habits, but in no case may a student substitute athletic training for all the practical work in Course 2.

Students offering these athletic substitutions will not be excused from regular attendance on days of registration, enrolment, and written examinations, either final or monthly.

Students offering athletic training in substitution for regular requirements must complete the athletic training requirements in the athletic "courses" which they elected. Failure to train satisfactorily throughout the entire season of the athletic sport selected by the student will be regarded as a failure in the course for which the substitution was offered.

MATHEMATICS

†*1. Solid Geometry.

Text-book: Ford and Ammerman, *Solid Geometry.*

Prescribed for students in Science, unless presented for admission. Three hours a week; 3 credits.

†*2. Trigonometry.

Text-book: Rothrock, *Elements of Plane and Spherical Trigonometry.*

Prescribed for students in Arts and Science, unless presented for admission. Three hours a week; 3 credits.

†*3. Advanced Algebra.

Text-book: Fite, *College Algebra.*

Prescribed for: { Science students who do not present Advanced Algebra for entrance. / Arts students who do not present Advanced Algebra for entrance, unless Mathematics 41 is elected.

Three hours a week; 3 credits.

†*4. Analytic Geometry and Calculus.

Text-books: Wilson and Tracey, *Analytic Geometry;* Granville, *Differential and Integral Calculus.*

Prerequisites: Entrance Trigonometry or Mathematics 2, and Entrance Advanced Algebra or Mathematics 3. Prescribed for Students in Science; elective for students in Arts and in Social Science. Five hours a week; 5 credits.

†*5. Calculus.

Text-book: Granville, *Differential and Integral Calculus.*

Prerequisite: Mathematics 4. Prescribed for students in Science; elective for students in Arts and in Social Science. Five hours a week; 5 credits.

*6. Solid Geometry and Trigonometry.

Text-books: Ford and Ammerman, *Solid Geometry;* Rothrock, *Elements of Plane and Spherical Trigonometry.*

Prescribed for students in Social Science who do not present Solid Geometry and Trigonometry for admission. Four hours a week; 4 credits.

*7. Elements of Analytic Geometry and Calculus.

Text-book: Smith and Granville, *Elementary Analysis.*

Prerequisite: Entrance Solid Geometry and Entrance Trigonometry, or Mathematics 1 and Mathematics 2, or Mathematics 6. Prescribed for students in Social Science. Four hours a week; 4 credits.

11. Arithmetic. *Professor Whitford.*

Text-books: Tannery, *Leçons d'Arithmétique;* Fine, *College Algebra.*

Prerequisites: Mathematics 5 or 42, and a good reading knowledge of French. Fall term, two hours a week; 2 credits. (Not offered in 1920-1921.)

12. History of Mathematics. *Professor Allen.*

Prerequisite: Mathematics 5 or 42. Spring term, two hours a week; 2 credits.

13. Advanced Differential Calculus. *Professor Reynolds.*

Text-book: Williamson, *Differential Calculus.*

Prerequisite: Mathematics 5. Fall term, three hours a week; 3 credits.

14. Advanced Integral Calculus. *Professor Reynolds.*

Text-book: Williamson, *Integral Calculus.*

Prerequisite: Mathematics 5. Spring term, three hours a week; 3 credits.

***15. Ordinary Differential Equations.**

Fall term. *Professor Pedersen.*
Spring term, *Professor Reynolds.*

Text-book: Murray, *Differential Equations.*

Prerequisite: Mathematics 5. Three hours a week; 3 credits.

16. Vector Analysis. Fall Term, *Professor Reynolds.*
Spring term, *Professor Saurel.*

Text-book: Gibbs, *Vector Analysis.*

Prerequisite: Mathematics 5. Three hours a week; 3 credits.

17. Differential Geometry. *Professor Saurel.*

Text-book: Snyder and Sisam, *Analytic Geometry of Space.*

Prerequisite: Mathematics 15. Fall term, three hours a week; 3 credits.

18. Partial Differential Equations. *Professor Saurel.*

Text-book: Johnson, *Differential Equations;* Byerly, *Fourier's Series and Spherical Harmonics.*

Prerequisite: Mathematics 15 and 17. Spring term, three hours a week; 3 credits. (Not offered in 1920-1921.)

19. Theory of Probability. *Professor Linehan.*

Prerequisite: Mathematics 5 or 42. Spring term, three hours a week; 3 credits.

41. Analytic Geometry (Outline).

Text-book: Wilson and Tracey, *Analytic Geometry.*

Prerequisite: Entrance Trigonometry or Mathematics 2. Elective for students in Arts. Three hours a week; 3 credits.

42. Differential and Integral Calculus (Outline).

Text-books: Fisher, *Infinitesimal Calculus,* Osborne, *Differential and Integral Calculus.*

Prerequisite: Mathematics 41. Elective for students in Arts. Three hours a week; 3 credits.

***120. Mathematical Theory of Investment.**

Professor Philip.

Offered in the School of Business and Civic Administration; may be counted without restriction in the College of Liberal Arts and Science; for description, see p. 177.

MILITARY SCIENCE AND TACTICS

The students receiving instruction in this department form two units of the Reserve Officers' Training Corps, one of Infantry and one of the Signal Corps, under the command of the Professor of Military Science and Tactics, who is an officer of the United States Army. The primary purpose of the Training Corps is to qualify selected students to be reserve officers in the military forces of the United States. The design of the War Department, however, is to attain this object while the students are pursuing their general or professional studies, with the least practicable interference with their civil careers, employing methods calculated to fit them for the pursuits of peace as well as of war. The Department aims to give all students of the Corps a thorough physical training, to inculcate an appreciation of lawful authority, and to teach the fundamentals of the military profession, including the special knowledge required for various branches of the service. At the termination of their instruction they should possess, with a good general education and special training in the academic requirements of the particular arm chosen, the essential characteristics of well balanced junior officers.

The work is divided by the War Department regulations into two parts, comprising the Basic and the Advanced Courses, each requiring two years.

The first two years' work is prescribed for all students. The privileges of a public institution in a democracy can be granted only to those who accept the duties of democratic citizenship. Hence these Basic courses are not merely required for the Bachelor's degree; they must be taken and successfully pursued if a student is to enjoy the privileges of the College. They cannot be postponed, and failure of attendance or irregularity in attendance will not be permitted.

1-2. Basic Course, First Year, Infantry and Signal Corps.

Organization; military courtesy and discipline; drill; care and handling of arms and equipments; small-arms firing; personal hygiene and sanitation; interior guard duty; minor tactics; morale; physical training.

3-4. Basic Course, Second Year, Infantry.

The same subjects as the first year, with the addition of liaison, topography and map-reading, signaling, field engineering, orders and messages.

5-6. Basic Course, Second Year, Signal Corps.

The subjects are the same as in 3-4, except that one hour a week is devoted to field radio sets.

Courses 1, 2, 3 and 4, or 1, 2, 5 and 6 are prescribed for all students during the first four terms of their attendance at the College. Three hours a week; 1 credit each term.

The advanced work which follows is elective, but each student admitted to it must sign an agreement to continue it to the end of his college course.

11-12. Advanced Course, First Year, Infantry.

Camp sanitation and care of troops in the field; minor tactics; liaison for all arms; topography; field engineering; law, common and military; military policy; drill; ceremonies; marching and care of arms and equipment; small arms firing; interior guard duty.

13-14. Advanced Course, Second Year, Infantry.

Minor tactics; topography; field engineering; company administration; military policy; history and economics; military law; military history; tactical walks; drills and ceremonies.

21-22. Advanced Course, First Year, Signal Corps.

The work of the course is similar to that of 11-12, except that three hours a week are devoted to elementary telephone, telegraph and radio engineering.

23-24. Advanced Course, Second Year, Signal Corps.

The work is similar to that of 13-14, except that three hours a week are devoted to advanced telephone, telegraph, and radio engineering.

Courses 11-24: five hours a week; 2 credits each term.

To qualify for a commission in the Reserve Officers' Training Corps, students must attend one summer camp at the end of the first Basic year and one at the end of the first Advanced Year.

Uniforms, arms and equipment are provided by the Government, and, for those attending camp, transportation and subsistence in addition. For those students taking the Advanced Course, the Government pays commutation of subsistence amounting to approximately $150 per year. Upon the completion of the Advanced Course, qualified students will be selected to receive commissions in the Reserve Officers' Corps, and may be appointed by the President as temporary second lieutenants in the United States Army for six months, with pay at the rate of $100 per month.

MUSIC

11. History and Appreciation of Music.

Professor Baldwin.

A comprehensive study of the growth of music as an art, the development and analysis of musical forms, and the great composers from the standpoint of an intelligent appreciation. No practical knowledge of music is required. The work is conducted by means of lectures with ample musical illustrations, recitations, text-book study and prepared papers. Text-book: Hamilton, *Outlines of Music History.*

Two hours a week; 2 credits.

12. A Study of Modern Music. *Professor Baldwin.*

This subject is intended to supplement the preceding, and is devoted to a detailed study of composers of the nineteenth and twentieth centuries, including the various phases of instrumental music since Beethoven, and the development of the modern music-drama. Lectures are given with musical illustrations; and recitations, readings and a thesis from each student upon some assigned phase of the subject are required.

Prerequisite: Music 11. Spring term; two hours a week; 2 credits.

13. Harmony. *Professor Baldwin.*

This course deals with the formation of chords and their proper relationship. The study of harmony will be carried through triads and their inversions, seventh and ninth chords, altered chords, non-harmonic tones and modulations, and will involve harmonizing both given basses and given melodies. Some practical knowledge of music is required for admission.

Fall term; two hours a week; 2 credits.

This Department also conducts the following:

Weekly Public Lectures in Appreciation of Music. Tuesday afternoons at 4.15, October to May, inclusive.

Glee Club. The object is to develop choral singing in the College, and includes instruction in the rudiments of voice production.

Orchestra. A course in orchestral training is open to all students of the College who are properly qualified, and to students of music outside of the College, in order that instruments which cannot be supplied by the college students may be secured.

Organ Recitals given by Professor Baldwin twice each week throughout the college year.

PHILOSOPHY

†*1. Introduction to Philosophy.
Professors Overstreet, Cohen, J. P. Turner and Marsh.

An analysis of the great views that have been presented in the history of thought as to the nature of man and the cosmos.

Prescribed; three hours a week; 3 credits.

***2. History of Philosophy: Ancient and Medieval.**
Professors Overstreet, Cohen and Turner.

A study of the leading philosophical points of view developed in ancient and medieval thought.

Fall term; three hours a week; 3 credits. May be taken independently of 3. Prescribed for Social Science students unless 3 is taken.

***3. History of Philosophy: Modern.**
Professors Overstreet, Cohen and Turner.

A study of the leading philosophical points of view developed in modern thought.

Spring term; three hours a week; 3 credits. May be taken independently of 2. Prescribed for Social Science students unless 2 is taken.

***12. Logic and Scientific Method.** *Professor Cohen.*

This course aims to acquaint the student with the main principles of deductive and inductive inference and with some of the more specific methods of scientific thinking and research.

Three hours a week; 3 credits.

13. Philosophy of Science. *Professor Cohen.*

A study of the logical and metaphysical problems presented by the mathematical, natural and social sciences. The aim of the course is to deepen the student's insight into the nature of scientific method and the world-view based on it. The work is carried on partly through reports on memoirs which have had an important influence in the history of science.

Prerequisite: Completion of all the prescribed Science work and Philosophy 12. Fall term; three hours a week; 3 credits.

14. Philosophy of Law. *Professor Cohen.*

A study of the ethical and metaphysical principles at the basis of our judicial procedure and social legislation. The leading features of the Roman and the common law, and such topics as the theory of property, contract, tort, etc., will be studied. The

aim of this course is to place the student in a position to estimate the resources of the law as a factor in the ethical transformation of society. Lectures and student reports on selected readings from such works as Sohm's *Institutes of Roman Law,* Bentham's *Theory of Legislation,* and Salmond's *Jurisprudence.*

Spring term; three hours a week; 3 credits.

15. Philosophy of Civilization: Part I. *Professor Cohen.*

A critical analysis of the various theories of civilization and progress that serve as bases of judgment on the ethical aims of national and international action.

Fall term; three hours a week; 3 credits. May be taken independently of 16.

16. Philosophy of Civilization: Part II. *Professor Cohen.*

A study of the meaning and basis of art, religion, literature and science as social institutions and as giving value to human endeavor.

Spring term; three hours a week; 3 credits. May be taken independently of 15.

17. Social Philosophy. *Professor Overstreet.*

A study of the relation between social activities, institutions, etc., and the fundamental aims of life.

Spring term; three hours a week; 3 credits.

18. Contemporary Philosophy. *Professor Overstreet.*

A study of the current movements of philosophical thought, particularly the pragmatism of James and Dewey, the evolutional creationism of Bergson, and the neo-realism of the English and American schools.

Prerequisite: Philosophy 2 or 3. Fall term; three hours a week; 3 credits.

PSYCHOLOGY

†*5. General Psychology. *Professors Turner and Marsh.*

This course is introductory to all the following courses in Psychology. Its object is to present the essential facts and laws of behavior and to indicate their bearing upon the various practical interests of life, such as education, law, medicine, politics, business, etc. Recitations, demonstrations and experimental work.

Prescribed for students in Social Science. Three hours a week; 3 credits.

53. Psychology of the Intellectual Processes.

Professor Marsh.

A general study of perception, imagination, memory, judgment, reasoning, etc., together with training in experimental practices and analysis of these capacities in the student. The course exhibits current methods and devices used in mental testing and studies the import of individual likenesses and differences. It also guides each student in gauging his own intellectural caliber by means of standardized measures.

Prerequisite: Philosophy 5. Fall term; two lectures and two laboratory hours each week; 3 credits.

54. Psychology of the Volitional Processes.

Professor Marsh.

A course in the psychology of attention, motive, will, habit, morale, leadership, etc., with applications to the problems of personnel and performance, both in industry and in recreation, and with vocational suggestions to the student. Especial study is given to psychographs of persons successful in their pursuits and to the experience of corporations now utilizing psychological methods.

Prerequisite: Philosophy 5; 53 is advised. Spring term; two lectures and two laboratory hours a week; 3 credits.

55. Abnormal Psychology. *Professor Turner.*

This course is offered with particular reference to the needs of students who plan to enter the medical profession; but it is designed also for students whose interest in psychology is more general. The special field traversed is suggested by the topics treated: hysteria, multi-personality, dreams, suggestions, etc. Lectures, recitations and clinical visits.

Prerequisite: Philosophy 5. Spring term; three hours a week; 3 credits.

56. Social Psychology. *Professor Turner.*

A study will be made of the psychological factors underlying social relations; the basis of institutions in original nature; the varieties of crowd behavior; the mental qualities of the criminal; the relation of climate to racial characteristics, etc. Analysis will be made of such conceptions as suggestion, imitation, progress, invention, etc.

Prerequisite: Philosophy 5. Fall term; three hours a week; 3 credits.

57. Current Psychological Theory. *Professor Turner.*

The work of Course 5, continued in a more intensive manner, attention being given to the more striking tendencies of the day. After a brief historical survey, the present situation in the field

of psychology is presented in an effort to evaluate the work of the chief writers. Lectures, student reports, recitations and discussions.

Prerequisite: Philosophy 5. Spring term; three hours a week; 3 credits.

58. Genetic Psychology. *Professor Marsh.*

This course is a study of the steps and results of mental growth. Genetically, the course examines the origin and evolution of the mind; and comparatively, it relates plant and animal, child and adult, normal and abnormal, individual and social, material and spiritual phases of the self. For a full understanding of mental powers, of their acquisition and training, and of personality in its social outlook, a genetic and comparative study is fundamental. Lectures, experiments and reports.

Prerequisite: Philosophy 5. Fall term; three hours a week; 3 credits.

171. Educational Psychology.

This course is identical with Education 121. (See page 89.)

Prerequisite: Philosophy 5. Three hours a week; 3 credits.

172. Education of Exceptional Children.

This course is identical with Education 181. (See page 91.)

Prerequisite: Philosophy 5. Three hours a week; 3 credits.

PHYSICS

Courses 1 and 2 are elementary courses intended for students who do not offer physics for entrance. Nothing more being required of candidates for the degree in Arts, the entire subject is covered in a general way, special emphasis being laid on the primary facts and on the important principles. The study is pursued by means of lectures, recitations and individual laboratory exercises. Students are held strictly accountable for all the apparatus assigned to their use, and must replace any lost by breakage or wasted through carelessness.

Courses 3-6 are intended more especially as a preparation in college physics for students of science. The aim is to impart clear, definite and exact conceptions of the numerous observed facts of physics, to show that all phenomena are special instances under a few more inclusive generalizations called laws, and to bring out the relations between the various parts of the science as evidence of the underlying unity of the subject.

In all of the experimental work attention is given to the setting up and to the use of the apparatus for the purpose of securing the best conditions of manipulation and the most accurate results of which the apparatus is capable. The reports are required to contain a proper tabulation of all observed data, complete calculation of results, a full statement of the conclusions, and appropriate diagrams and plots.

†*1. Mechanics, Heat and Magnetism.

Text-book: Millikan and Gale, *A First Course in Physics.*

Prescribed for all students who do not offer physics for entrance; two laboratory and three recitation and lecture hours a week; 3 credits.

†*2. Sound, Light and Electricity.

The same text-book is used as in Course 1.

Prerequisite: Physics 1. Prescribed as stated for Physics 1; 3 credits.

†*3. Mechanics, Wave Motion, Sound and Heat.

Text-book: Kimball, *College Physics.*

Prerequisite: Physics 1 and 2 or their equivalent. Prescribed for students in Science and Social Science. One lecture and two recitations a week; 2 credits.

†*5. Laboratory on Topics in Course 3.

This includes the following: the study and use of the micrometer, the spirit level, the chemical balance, thermometers, pyrometers, hydrometers, the study of torque, angular

velocity and acceleration and their relation to rotational mass, the laws of torsion, the determination of "g," specific gravity of liquids, specific heat and latent heat, expansion coefficients, the mechanical equivalent of heat.

Co-requisite or prerequisite: Physics 3. Prescribed for students in Science. Two hours a week; 1 credit.

***7. Problem Work on Topics in Course 3.**

Prescribed for Engineering students. Two hours a week; 1 credit.

†*4. Magnetism, Electricity and Light.

Text-book: Kimball, *College Physics.*

Prerequisite: Physics 3. Prescribed for students in Science and Social Science. One lecture and two recitations a week; 2 credits.

†*6. Laboratory on Topics in Course 4.

The following are some of the exercises: the study of lenses and optical instruments by means of the optical bench; spectrometry, photometry, saccharimetry, polarimetry, spectroscopy; the study of direct current circuits involving the use of measuring instruments; the transformation of electrical energy into light and heat, including the testing of lamps and heaters; the magnetic circuit, the telephone, the telegraph, simple motors and generators.

Prerequisite: Physics 5. Co-requisite or prerequisite: Physics 4. Prescribed for students in Science. Two hours a week; 1 credit.

***8. Problem Work on Topics in Course 4.**

Prescribed for Engineering students. Two hours a week; 1 credit.

The following courses, which are *elective,* are offered with two objects in views; to enable a student to continue his training in theoretical physics by the choice of a subject in which the mathematical treatment of physical problems serves to show the adaptability of mathematics to the investigation of natural phenomena; or to begin his preparation for engineering and technical work by choosing subjects involving the application of physics and mathematics to practical problems.

***11. Electricity** (Advanced Course).

The purpose of this course is to prepare the student for the study of electrical engineering by presenting to him the principles of electricity and magnetism which form the foundation of the art. The term's work is nearly equally divided between the exposition of those principles which apply equally to both direct and alternating currents, and those which belong particularly to varying currents.

Text-book: Pender, *Principles of Electrical Engineering.*

Prerequisite: Physics 4 and Mathematics 5. Three hours a week; 3 credits.

*12. **Mechanics** (Advanced Course).

This is in general an application of mathematics to the principles of mechanics of particles and rigid bodies. It includes a study of statics, kinematics and kinetics, with special emphasis upon practical features. Numerous problems are solved, especially in the statics of simple trusses from analytical and graphical standpoints. The development of the subject is from a few fundamental laws, so as to obtain a scheme of mechanics that is mathematically philosophical in form, and yet practical in its applications to engineering.

Text-book: Dadourian, *Analytical Mechanics* (revised edition).

Co-requisite or prerequisite: Mathematics 5. Prerequisite: Physics 3. Five hours a week; 4 credits.

13. **Heat** (Advanced Course).

This course is designed to give the additional preparation required by students of chemistry or engineering.

Text-book: Edser, *Heat for Advanced Students.*

Prerequisite: Physics 3 and Mathematics 5. Fall term, four hours a week; 3 credits.

14. **Wave Motion and Light.**

A general course in the theory of wave motion and a more advanced study of the principal phenomena of sound and light.

Prerequisite: Physics 4 and Mathematics 5; three hours a week; 3 credits.

16. **Mathematical Physics.**

This course is designed as an introduction to the various branches of mathematical physics, such as the theory of the potential function, the use of the Fourier series, the theory of electricity (including electro-magnetism), the phenomena of light and heat, the general treatment of oscillations and of wave motion.

Stress will be laid upon the intimate correlation between apparently unrelated subjects, leading the student to a greater unity in his view of scientific phenomena.

The course is one of lectures, discussions and reports. Various books will be used for reference during the term.

Prerequisite: Physics 4 and Mathematics 5. Spring term, four hours a week; 3 credits.

21. **Advanced Laboratory Course.**

The experiments are designed to elucidate the principles and theory taken up in the more advanced courses 11, 12, 13 and 14. The selection of experiments will depend on the courses in physics taken and also on the special interest of the student in physics, chemistry, medicine, engineering, or mathematisms. Stu-

dents are advised to elect this work in connection with the courses 11, 12, 13 and 14.

Prerequisite or co-requisite: an elective course in Physics; four hours a week; 2 credits.

***31. Descriptive Astronomy.**

A study of the systems of coordinates, sun, moon, planets, eclipses, tides. Lectures and recitations are supplemented by observations. Text-book: Young, *General Astronomy.*

Fall term, four hours a week; 3 credits.

32. Elementary Practical Astronomy.

Determination of time, latitude, longitude and azimuth; practice with the sextant and transit, each student completing ten selected problems. The two small towers on the main building are fitted up with instruments and conveniences for this purpose. The Newcomb Library, donated by Mr. John Clafln, '69, is available for reference. Text-book: Campbell, *Elements of Practical Astronomy.*

Prerequisite: Physics 31. Spring term, four hours a week, divided between lectures, recitations, and observations; 3 credits.

PUBLIC SPEAKING

The purpose of the prescribed work of this department is the development of the art of public speaking. In Courses 1-4 the students are first trained in the principles of expression and their elocutionary application, during the freshman and sophomore years; and then, in Courses 5-8, in public speaking proper, during the junior and senior years. The first, which treats the manner of delivery, is a necessary preparation for the second, in which, all the speeches being original, the emphasis is placed on the thought and structure. All the prscribed courses (1 to 8) must be taken in sequence.

Classes are formed to give special help to those who, because of foreign birth or foreign influences, do not pronounce the English language well, and for those who have some impediment of speech, as lisping or stuttering.

†*1. Vocal Expression.

Professors Redmond and Mosher; Messrs. Schulz, Healy and Coulton.

The aim is to develop a correct, convincing and attractive style of oral delivery. Proper breathing, distinct enunciation and the operation and control of the voice, with reference to quality, pitch, rate and force are studied and developed by a large amount of speaking in the class-room. Particular attention is devoted to overcoming speech faults, such as dialect sounds, drawling, monotony, sound-clipping, indistinctness, bad phrasing, lisping, nasal or throaty voice, etc. In brief, a clean-cut, accurate agreeable and forceful use of the voice in English speech is the central idea of the course. Text-book: Palmer and Sammis, *Principles of Oral English.*

Prescribed; one hour a week; 1 credit.

†*2. Visible Expression.

Professors Redmond and Mosher; Messrs. Schulz, Healy and Coulton.

The purpose is to inculcate a thorough understanding of the nature of expressive gesture, and to develop in the students a habit of easy, effective action in delivery. To this end, the function of facial expression and the postures and movements of the body, limbs, head and hands are carefully analyzed and explained. The various lines of action and the several forms of the hand in gesture are considered strictly from the point of view of their expressiveness to the audience. The idea is to replace awkward,

aimless, distracting motions by skillful, purposeful expression. As in Course 1, the work is conducted with constant emphasis on the actual speaking of the student to accustom him to unobtrusive, spontaneous action. Text-book: Mosher: *Essentials of Effective Gesture.*

Prescribed; one hour a week; 1 credit.

†*3. Prose Declamation.

Messrs. Hatch, Schultz, Healy and Coulton.

An extended and co-ordinated application of the fundamental principles developed in the preceding courses. The students are required to make an analysis of the intellectual and emotional content of all selections, as a preparation for sympathetic, intelligent delivery. Much time is devoted to actual practice in speech, with the aim of cultivating the mental and physical habits requisite for effective delivery.

Prescribed; one hour a week; 1 credit.

†*4. Poetry Declamation.

Messrs. Hatch, Schultz, Healy and Coulton.

An adaptation of the aims and methods of the preceding course to the declamation of poetry. Stress is laid on the understanding and appreciation of the specific features which distinguish poetry from prose, such as rhyme, meter and distinctive emotional qualities. Especial attention is also given to the development of a fitting and skillful technique in the expression of verse forms.

Prescribed; one hour a week; 1 credit.

For the following courses, a knowledge of the mechanics of expression is presupposed; the emphasis in instruction is placed largely on subject-matter and construction. All the speaking in courses 5, 6, 7 *and* 8 *is extemporaneous.*

†*5. Debate. (First Term.)

Professors Redmond and Mosher; Messrs. Schultz and Coulton.

The students are first acquainted with such fundamental matters of debate as sources of material, analysis of a proposition, brief-making, speech construction, types of argument and common fallacies. Following this, the preparation of briefs and participation in class-room debates are continued throughout the course. Each debate is criticised by the instructor.

Prescribed; one hour a week; 1 credit.

†*6. Debate. (Second Term.)

Professors Redmond and Mosher; Messrs. Schultz and Coulton.

A continuation of the practice of debate. After a review of principles, debates and criticism are resumed. Briefs are re-

quired as in course 5. More attention is given to refutation, both in the student's preparation and in his critical analysis of his opponent's case in debate.

Prescribed; one hour a week; 1 credit.

†*7. Extemporaneous Speaking. (First Term.)

Professors Palmer and Redmond.

The aim is chiefly to develop the student's capacity to think while before an audience and to express himself clearly, forcefully and persuasively without having previously written and memorized his address. Preparation is confined to gathering material and outlining the points of the speech.

Preliminary lectures deal with organization of material, outlining of speeches, oral composition with respect to clearness, coherence and emphasis, style of delivery, the speaker's relation to his subject and his audience. These factors are directly applied to the preparation and delivery of student speeches in the classroom. During the term several seven-minute speeches will be presented by each member of the class.

Prescribed; one hour a week; 1 credit.

†*8. Extemporaneous Speaking. (Second Term.)

Professors Palmer and Mosher.

The aim is, first, to cultivate the student's ability to make a more sustained extemporaneous address than was attempted in course 7; and, secondly, to develop readiness and skill in discussing addresses presented by others. The convention method is followed in the conduct of the course. At each meeting of the class one member of the class delivers a twenty-minute speech on a previously announced subject. This is followed by several five-minute discussions by other members. The leading speaker then summarizes the entire proceedings of the period.

Prescribed; one hour a week; 1 credit.

11. Science of Debate. *Mr. Schultz.*

The regular junior work in the art of debate is supplemented by a careful consideration of the science that underlies the art. Specimens of argumentation illustrating the different forms of reasoning are studied, until the student is able immediately to classify any argument presented to him and point out its vulnerable points. The several classes of fallacies are examined with the two-fold purpose in view (1st) of enabling the student to detect fallacies, and (2nd) of enabling him to make clear to an audience the fact of fallacy and the reason for it.

Elective. Prerequisite: Public Speaking 3 and 4. Spring term, two hours a week; 2 credits.

12. History of Oratory. *Mr. Schultz.*

This course opens with a brief survey of the oratory of Greece and Rome, including an analysis of the classical theories and practice of the art. Against this background, the history of British and American eloquence of the 18th and 19th centuries is studied. Important speeches of the greatest orators of the latter period are presented and analyzed in class, and the situations which called them forth are discussed. The attempt is made to estimate the personalities and the influence of these outstanding figures, as well as their contributions to the traditions of their art, with the aim of understanding the practical importance of oratory in modern life and the psychological problems involved.

Elective. Prerequisite: Public Speaking 3 and 4. Fall term, two hours a week; 2 credits.

ROMANCE LANGUAGES

FRENCH

Courses 1-4 are prescribed for students in Arts who have chosen French as their second language.

Students in Science or Social Science who have selected French to meet their requirement of one year of language study will begin with Course 1 or Course 2 according as they have presented two units or three for admission to College.

***1. Readings in Modern French.**

Some standard works are studied. Grammar, composition, conversation. Sight-reading in modern writers.

Four hours a week; 3½ credits.

***2. Readings in Modern French.**

Some standard works (more difficult than in Course 1) are studied. Composition, conversation. Sight-reading in a modern writer.

Four hours a week; 3½ credits.

***3. The Seventeenth Century.**

Studies in Vorneille, Racine, Boileau. Sight-reading.

Four hours a week; 3½ credits.

***4. The Seventeenth Century.**

Molière, La Fontaine, Mme. de Sévigné, and other authors. A modern work read at sight.

Four hours a week; 3½ credits.

11. The Novel in the Nineteenth Century.

With a study of the history of the novel.

Elective for those who have had French 4, or who have completed French 3 with grade A or B. Fall term; three hours a week; 3 credits.

12. Poetry in the Nineteenth Century.

Some poems in former centuries are read, but the work deals mainly with the nineteenth and twentieth centuries.

Prerequisites as for French 11. Spring term, three hours a week; 3 credits.

13. Modern Drama.

History of French drama; special study of plays of the nineteenth and twentieth centuries.

Prerequisites as for French 11. Fall term; two hours a week; 2 credits.

14. Modern Drama.

Differs from French 13 merely in the choice of plays to be studied.

Prerequisites as for French 11. Spring term; two hours a week; 2 credits.

18. History of French Literature.

Especial emphasis upon portions not studied in detail in other courses.

Spring term; two hours a week: 2 credits.

19. Science Readings.

Prerequisite: French 3. Fall term; two hours a week; 2 credits.

21. The Eighteenth Century.

Political, social, and educational questions as found in Montesquieu, Voltaire, Rousseau, Diderot, etc.

Prerequisites as for French 11. Fall term; two hours a week; 2 credits.

31. Advanced Composition.

Prerequisites as for French 11. Fall term; two hours a week; 2 credits.

32. Advanced Composition—Continued.

Prerequisite: French 31. Spring term; two hours a week; 2 credits.

33. Advanced Study in Grammar, Diction, Methods of Teaching.

Prerequisites as for French 11. Fall term; three hours a week; 3 credits.

34. History of the French Language.

Prerequisites as for French 11. Spring term; two hours a week; 2 credits.

41-42 Elementary French.

Oral work, grammar, reading, translation and composition.

Elective; may be taken as a third language in Arts. Two consecutive terms; three hours a week; 6 credits.

43-44. Intermediate French.

A continuation of Courses 41-42. Grammar, readings in modern writers, and composition.

Fall and spring terms; three hours a week; 3 credits each term.

Courses 51-54 *are special courses for students who have been admitted to College with less than the required preparation in languages.*

51. Elementary French.

A course for beginners; intended to be the equivalent of a year of high school work.

Five hours a week.

53. Second Year French.
Three hours a week.

54. Second Year French (Continued).
Three hours a week.

***111-*112. Commercial French.**
Offered in the School of Business and Civic Administration; may be counted as restricted courses in the College of Liberal Arts and Science; for description, see p. 173.

ITALIAN

41-42. Elementary.
Oral work, grammar, reading, translation and composition.
Elective; may be taken as a third language in Arts. Two consecutive terms; three hours a week; 6 credits.

SPANISH

Students in Science or Social Science who have selected Spanish to meet their requirement of one year of language study will begin with Course 1 or Course 3, according as they have presented two units or three for admission to college.

***1. Intermediate.**
A modern novel or play. Review of grammar. Composition. Sight reading in a modern writer.
Four hours a week; 3½ credits.

***2. Intermediate.**
A modern novel or play. Composition. Sight reading in a modern writer.
Four hours a week; 3½ credits.

3-4. Advanced.
Studies in various authors of the seventeenth century. Sight reading.
Two terms; four hours a week; 7 credits.

11. Don Quijote.
Prerequisite: Spanish 2. Fall term, two hours a week; 2 credits.

12. Literature.
Lectures giving briefly an outline of the history of Spanish literature. Reading of extracts from the works of some of the classical authors, and the writing of short essays by the students.
Prerequisite: Spanish 2. Spring term; two hours a week; 2 credits.

13-14. The Classical Drama.

Lectures and the reading of extracts from the works of Lope de Vega, Calderón, Juan Ruiz de Alarcón, Tirso de Molina and others.

Prerequisite: Spanish 2. Fall and spring terms; three hours a week; 6 credits.

***41-*42. Elementary.**

Oral work, grammar, reading, translation and composition.

Elective; may be taken as a third language in Arts. Two consecutive terms; three hours a week; 6 credits.

***43-*44. Intermediate.**

A continuation of Courses 41-42. Reading of a modern novel or play. Review of grammar. Composition.

Fall and spring terms, three hours a week; 3 credits each term.

Courses 51-54 *are special courses for students who have been admitted to College with less than the required preparation in languages.*

51. Elementary Spanish.

A course for beginners; intended to be the equivalent of a year of high school work.

Five hours a week.

53. Second Year Spanish.

Three hours a week.

54. Second Year Spanish (Continued).

Three hours a week.

***111-*112. Commercial Spanish.**

Offered in the School of Business and Civic Administration; may be counted as restricted courses in the College of Liberal Arts and Science; for description, see p. 175.

Scholarship Requirements and Academic Standing

The result of a student's work in every subject of study, whether prescribed or elective, shall be marked and expressed by a single final grade indicated by one of the six letters, A, B, C, D, E, or F, corresponding, respectively, to percentages in the nineties, eighties, seventies, sixties, fifties and those below fifty. A, B, C, and D are *passing* grades for which students are credited with the number of counts belonging to the particular subject. A signifies *exceptional excellence;* B *very good* work; C *fairly good* work of the ordinary type; D merely a *passing* mark; E a *condition;* and F a *failure.*

In estimating the counts for registration and graduation, a student receiving four credits with grade A shall, for every such four credits, have an *extra* credit point. Similarly for every eight credits received with grade B. For every eight credits received with grade D, one credit shall be *deducted.*

Whenever a student has obtained eighty original credits with grade D, no further credits shall be allowed him for work done with a grade less than C.

A student receiving a grade F in a prescribed course shall repeat that course.

A student receiving the grade E in any course is conditioned in that course; but is not thereby precluded from continuing his work in the department, except under the following provisions:

(*a*) No student is allowed more than two conditions in the work of any one term; and each additional grade E shall be rated as an F.

(*b*) Any student who has received the grade F in more than one course at the end of a term shall not be allowed more than one condition; and if he has received F in more than two courses, he shall not be allowed any condition. In such cases the additional courses reported E shall be rated F.

Examinations for the removal of conditions received in January or June shall be held on a day during the spring or fall term, respectively, to be fixed by the President.

A condition is to be removed by satisfactory work or by re-examinations, as follows:

(*a*) If the course in which the conditions is incurred be announced as prerequisite to a subsequent course in the same department, the student shall be allowed to pursue the subsequent course; and, if his work in the latter be satisfactory,

the department may, at the time set for the re-examination, assign him the grade D in the prerequisite course, without requiring him to pass the re-examination.

(*b*) Otherwise a student may remove his condition or conditions at the re-examinations. Conditions so removed shall receive a grade not higher than C.

(*c*) A student who fails to pass the re-examination set for the removal of a particular condition shall have no further opportunity to remove it and shall receive the grade F for the course.

A student whose record at the close of a term is exceedingly poor, whether because of the number of failures or conditions incurred or because of repeated failure or condition in one course, may without preliminary warning be dismissed from college.

A student whose record at the close of the first half of a term in any course or courses is exceedingly poor, may without preliminary warning be dropped from the roll in such course or courses.

Students are expected to attend every college exercise for which their courses provide. Frequent absence or unsatisfactory work due to absence may be followed by exclusion from particular courses or by suspension.

Students late for any college period may be excluded from the room and marked absent.

A student who is absent from the final examination (whether oral or written) in any course, receives the grade F for the course. A special examination in such case may be granted only by the Faculty Committee on Course and Standing, and will be granted by that committee only upon the submission of written evidence showing that a student was physically unable to be present at the stated examination.

No student in the College shall be permitted to take more than 17½ credits during any term unless he has had during the preceding term an average grade B and has not fallen below C in any subject; and such a student shall not be allowed to take more than 17½ credits except by permission of the Committee on Course and Standing.

The requirement for enrolment in a class is as follows:

For Upper Freshman	13	credits
" Lower Sophomore	30	"
" Upper Sophomore	48	"
" Lower Junior	65	"
" Upper Junior	83	"
" Lower Senior	100	"
" Upper Senior	117	"
" Graduation	134	"

No student, however, shall be enrolled as a sophomore until he has removed all entrance conditions, and any student who is

at any time carrying a sufficient number of credits to complete the total required for graduation shall be registered as an upper senior.

A student shall not be graduated until he has received all the credits prescribed, and until all his indebtedness to the College has been discharged.

HONORS

Second Year. At the close of the second year there shall be three grades of honors:

Highest second year honors shall be given for the grade A in prescribed courses counting at least 50 credits, with the remaining grades B.

High second year honors shall be given for the grade A in prescribed courses counting at least 30 credits, with the remaining grades B.

Honors shall be given for the grades A and B in prescribed courses counting at least 55 credits.

Graduation. At graduation there shall be three grades of honors:

A degree *summa cum laude* shall be granted to those students who have received the grade A in courses counting at least 115 credits, with the remaining grades all B.

A degree *magna cum laude* shall be granted to those students who have received the grade A in courses counting at least 64 credits, with the remaining grades all B.

A degree *cum laude* shall be granted to those students who have received the grades A and B in courses counting at least 120 credits.

PHI BETA KAPPA

Gamma Chapter

Such members of the graduating class of the College of the City of New York as have distinguished themselves by scholarship, manliness, and integrity, may be elected to membership in the Gamma Chapter of Phi Beta Kappa upon proposal by the Committee on Admissions.

SCHOOL OF TECHNOLOGY

Faculty and Instructing Staff

Arranged by Departments

SIDNEY EDWARD MEZES, Ph.D., LL.D., *President and Dean pro tempore*
FREDERIC O. X. MCLOUGHLIN, C.E., A.M., *Secretary*

ART

LEIGH HARRISON HUNT, M.S., M.D.,	*Professor*
ENGELBERT NEUS, A.M.,	*Assistant Professor*
GEORGE C. AUTENRIETH, A. M.,	*Assistant Professor*

BIOLOGY

GEORGE G. SCOTT, Ph.D.,	*Associate Professor*
WILLIAM WARD BROWNE, Ph.D.,	*Assistant Professor*

CHEMISTRY

CHARLES BASKERVILLE, Ph.D.,	*Professor*
HERBERT R. MOODY, Ph.D.,	*Professor*
RESTON STEVENSON, Ph.D.,	*Associate Professor*
[1] HERMON CHARLES COOPER, Ph.D.,	*Assistant Professor*
ARTHUR SCHUTT,	*Instructor*
WALTER H. PEARCE,	*Special Instructor*
JOHN E. BROLLES, Jr., B.S.,	*Special Instructor*
HARRY PETER COATS, A.M.,	*Fellow*

ECONOMICS

GEORGE MONROE BRETT, A.B.,	*Assistant Professor*

ENGINEERING

ALFRED N. GOLDSMITH, Ph.D.,	*Associate Professor*
FREDERICK SKENE, B.S., C.E.,	*Associate Professor*
ARTHUR BRUCKNER, B.S., M.E.,	*Assistant Professor*
FREDERIC O. X. MCLOUGHLIN, C.E., A.M.,	*Assistant Professor*
GERARD IMMEDIATO, C.E., M.E.,	*Assistant Professor*[2]
LOUIS GOODMAN, A.M., C.E.,	*Lecturer*[2]
HARRY BAUM, B.S., E.E.,	*Instructor*
A. R. MACCLEAVE, C.E.,	*Tutor*
STEPHEN C. CARR, B.S.,	*Tutor*
HARRY M. SPITZENBERG,	*Tutor*
HERMAN B. WAAG, M.E.,	*Fellow*[2]

ENGLISH

LEWIS FREEMAN MOTT, Ph.D.,	*Professor*

FOREIGN LANGUAGES

CHARLES A. DOWNER, Ph.D.,	*Professor*

[1] Absent on leave.
[2] In the Evening Session.

GEOLOGY

Ivin Sickels, M.S., M.D., *Professor*

GOVERNMENT AND SOCIOLOGY

William B. Guthrie, Ph.D., *Associate Professor*

HISTORY

Nelson P. Mead, Ph.D., *Associate Professor*

HYGIENE

Thomas Andrew Storey, Ph.D., M.D., *Professor*

MATHEMATICS

Paul L. Saurel, D.Sc., *Professor*

PHILOSOPHY

Howard D. Marsh, Ph.D., *Assistant Professor*

PHYSICS

William Fox, B.S., M.E., *Professor*
Charles A. Corcoran, A.M., *Assistant Professor*

PUBLIC SPEAKING

Joseph A. Mosher, Ph.D., *Assistant Professor*

Committee on Course and Standing and on Admission.
Professors Fox, Moody, and Skene.

Courses in the Several Departments

Starred courses are offered in both the Day and Evening Sessions. Courses marked (†) were offered in the Summer Session of 1920.

For a statement of the curricula leading to the degrees in Engineering, see pp. 42-45.

ART

***112. Mechanical Drawing.** *Professor Autenrieth.*

The course in mechanical drawing begins with instruction and practice in the use of instruments and the making of working drawings for constructions of various kinds. The practical requirements of the modern workshop are always kept in view.

The work of this course embraces drawings of mechanical details, such as bolts and nuts, screws, springs, keys, pipe fittings, etc.; methods of dimensioning, tracing, etc.; making of scale-drawings from sketches of parts of machines; also the drawing of details from "assembly" drawings as a drill in the reading of drawings. Text-book: French, *Engineering Drawing.*

Prerequisite: Art 1-2. Spring term, six hours a week; 2 credits.

***113. Topographical Drawing.** *Professor Autenrieth.*

Study of signs employed in making topographical maps fully rendered. Plotting; particular attention being given to contour maps and the solution of problems relating thereto. The student is also required to plot the surveys made in the field during his course in practical surveying.

Prerequisite: Art 1-2. Co-requisite: CE101. Spring term, six hours a week; 2 credits.

115. Architectural Drawing. *Professor Neus.*

The classic orders and brush rendering. The proportions of the orders are studied from Ware's *American Vignola;* they are rendered in India ink outline as well as in India ink and color wash. Shadows are constructed by the student.

Prerequisite: Art 1-2. Fall term, three hours a week; 1 credit. (Not given in 1920-21.)

116. Architectural Drawing. *Professor Neus.*

Continuation of Course 115 with application of the orders to elementary architectural designs.

Prerequisite: 115. Spring term, three hours a week; 1 credit. (Not given in 1920-21.)

117. Architectural Drawing.

Drawings of architectural constructions and various types of house framing. Full brace, balloon and combination frames showing posts, girders, sills, plates, braces, beams, studding and rafters. Construction of window and door openings, framing for stairs and chimneys, dormers, hips and valleys. The various kinds of joints used in wood framing and the construction of roof-trusses will be thoroughly considered. This course is complete in itself, but also constitutes the first step for students choosing architecture as a profession.

Prerequisite: Art 1 or equivalent work. Four hours a week; 2 credits.

201. Advanced Mechanical Drawing and Elementary Machine Design. *Professor Autenrieth.*

A continuation of Course 112, including the proportioning of machine parts by empiric formulas. Modern practice in making, recording and filing shop drawings of machine details and assemblies. Use of standard connections and the interpretation of shop notes on drawings. Forms of machine parts as indicated by the nature of the resistances to be overcome by the characteristics of the material. Proportioning of parts by the use of modern empirical formulas derived from practical considerations, the method of arriving at these formulas and the limiting conditions in their use. Text-book: Marshall, *Elementary Machine Drawings and Design.*

Fall term, six hours a week; 2 credits. Fee, $15.

213. Structural Drafting.

Drafting of structural steel details. Standard rolled sections. Use of steel handbooks. Conventional riveting. Symbols. Floor framing plans. Standard connections. Beams and columns. Rivet spacing. Plate girders. Roof trusses. Bridge members.

Six hours a week; 2 credits. Fee, $15.

BIOLOGY

***41. General Bacteriology.**

Offered in the College of Liberal Arts and Science; required for the degree in Chemical Engineering or Civil Engineering; for description, see p. 74.

***142. Bacteriology of Foods.** *Professor W. W. Browne.*

This includes the bacteriologic examination of water, sewage, air, and milk and other food products, together with the methods used in the standardization of disinfectants, a detailed study of

yeast and bacterial fermentations and their application to the industries. Numerous trips to industrial plants are made.

Prerequisite: Biology 41. Fall term, one lecture and six laboratory hours a week; 3 credits.

***143. Bacteriology of Pathogenic Micro-organisms.**
Professor Browne.

A course devoted to the laboratory methods of biology as applied in the state and municipal boards of health. Practice is given on the methods used for the diagnosis of diphtheria, tuberculosis, together with a detailed study of the groups to which they belong.

Prerequisite: Biology 41. Spring term, one lecture and six laboratory hours a week; 3 credits.

***244. Potable and Industrial Water.** *Professor Browne.*

This course is offered in co-operation with the Department of Chemistry, and is identical with Chemistry 249. See page 151.

Prerequisite: Chemistry 4 and Biology 41. Chemistry 260 is desirable. Spring term, seven hours a week; counts 3. Fee, $17.50.

***148. Municipal Sanitation.** *Professor Browne.*

Lectures, discussions and visits to public works of special importance. The principles which underlie a pure water supply and the means by which the wastes of the city, its sewage and garbage, may be successfully disposed of, and the problems of pure milk and pure food supplies, the housing question with its special phase of ventilation and plumbing, and the methods by which a municipal board of health is organized to fight tuberculosis and other specific diseases will be studied.

Fall term, two lectures and one field trip a week; 3 credits.

149. Municipal Sanitary Inspection.
Professor Browne and Bureau of Foods and Drugs, New York City Department of Health.

The seminar work of this subject is done in the College; the field work in company with and under the direct supervision of an Inspector of the Department of Health of the City. The subject is limited to six students each semester, and is intended for those planning to go into this branch of the City's service. The qualifications will be based upon individuality, personality playing a prominent part.

Prerequisite: Biology 41 and 148 and Chemistry 159. Spring term, two seminar hours, one recitation and one inspection tour a week; 3 credits.

***260. Applied Inorganic Chemistry.**

Professor Moody and Assistant.

A foundational course in Applied Chemistry, in which lectures and laboratory practice are given on such subjects as use of fuels, technical evaporation, filtration and crystallization, the most important acids and alkalis, the soil, fertilizers, nitrogen industries, refrigeration, etc. Parallel reading is assigned in standard works of reference and in current technical journals.

Prerequisite: Chemistry 4. Fall term; lectures and recitations two hours, and five laboratory hours a week; 3 credits. Fee, $17.50.

261. Practice in Applied Inorganic Chemistry.

The work is an illustration of the application of the principles considered in Chemistry 260. Typical manufactures are closely studied, but attention is directed to basic principles as observed in the plants visited. Reports, sketches, and in some instances finished drawings are required. Most of this work is scheduled for Saturdays. Previous studies of plants, or factory experience, may be accepted in lieu thereof.

Prescribed for students in Chemical Engineering; open to others pursuing Chemistry 260, but without credit. Prerequisite: Art 112 and 201, Chemistry 4 and 260 (concurrently), and M.E. 122. Fall term; 1 credit. Fee, $7.50; students must bear the expenses incident to the excursions.

***265. Applied Organic Chemistry.**

Professor Moody and Assistant.

Lectures and laboratory practice are given on such subjects as commercial preparation of hydrocarbon gases, coal gas, and water gas, coal tar products, fibres and textile industries, starch and cellulose products, animal industries, oils, gums, soaps, sugar, etc. Text-books: Stadtler's *Industrial Organic Chemistry,* Roger's *Laboratory Guide to Industrial Chemistry.* Parallel reading is assigned in Nagel's *Mechanical Appliances of Chemical Industries and Lay-out, Design and Construction of Chemical Plants,* and in current technical journals. Experts from different industries give some of the lectures.

Students are advised, although not required, to take 260 and 265 in numerical sequence.

Prerequisite: Chemistry 4 and 50. Spring term; lectures and recitations two hours, and five laboratory hours a week; 3 credits. Fee, $17.50.

266. Practice in Applied Organic Chemistry.

Given in connection with Chemistry 265, and similar in character to Course 261, q.v.

Prescribed for students in Chemical Engineering; open to others pursuing Chemistry 265, but without credit. Prerequisites as for 261, substituting 265 for 260. Spring term; 1 credit. Fee, $7.50; students bear the expenses incident to the excursions.

280. Chemistry of Metals (Ferriferous). *Professor Moody.*

Such topics as fuels, cement, concrete, refractories, furnace building materials and the construction of typical furnaces, heat measurements, general metallurgical processes, especially cast and wrought iron, and steel are considered. The several subjects are studied practically in the laboratory. Text-books: Tarr's *Economic Geology,* Stoughton's *Mettallurgy of Iron and Steel,* McFarlane's *Practical Metallurgy.*

Prerequisite: Chemistry 4. Prerequisite or co-requisite: C.E. 110. Fall term; seminar and recitations two hours, and five laboratory hours a week; 3 credits. Fee, $17.50.

281. Practice in the Chemistry of Metals (Ferriferous).

Given in connection with Chemistry 280, and similar in character to Course 261, q.v.

Prescribed for students in Chemical Engineering; open to others pursuing Chemistry 280, but without credit. Prerequisites as for 261, substituting 280 for 260. Fall term; 1 credit. Fee, $7.50; students bear the expenses incident to the excursions.

288. Chemistry of Metals (Non-Ferriferous). *Professor Moody.*

The treatment of ores other than those of iron for the winning of metals, their subsequent working for various uses, as in coinage, alloys, electroplating, etc. The several steps are accompanied by practical verification in the laboratory, together with fire-assay work. Text-books: McFarlane's *Practical Metallurgy,* Hoffman's *Metallurgy of Copper,* Hiorn's *Mixed Metals,* and Lodge's *Notes on Assaying.*

Prerequisite: Chemistry 4, 280. Spring term; seminar and recitations two hours, and five laboratory hours a week: 3 credits. Fee, $17.50.

289. Practice in the Chemistry of Metals (Non-Ferriferous).

Given in connection with Chemistry 288, and similar in character to Course 261, q.v.

Elective for students in Chemical Engineering; open to others pursuing Chemistry 288, but without credit. Prerequisites as for 261, substituting 288 for 260. Spring term; 1 credit. Fee, $7.50; students bear the expenses incident to the excursions.

146. Municipal Chemistry. *Instructor to be announced.*

Special practice in standard methods of analysis of products purchased by the City (as coal, soap, paint, and oils, lubricating oils and greases, asphalt, cement and paper), accompanied by a study of applications and specifications. This course is given in co-operation with the Central Testing Laboratory of the City,

members of whose staff give some of the lectures and participate in the seminars. Text-books: Baskerville's Municipal Chemistry, standard works of reference, current journals and the instructor's notes.

Prerequisite: Chemistry 50. Eight laboratory hours a week; 3 credits.

195. Municipal Sanitary Inspection.

This course is identical with Biology 149; see page 147 for description.

Prerequisite: Biology 41 and 148, and Chemistry 159. Spring term, two seminar hours, one recitation and one inspection tour a week; 3 credits.

159. Food Inspection and Analysis.

Instructor to be announced.

Special practice in the analysis of food products and drugs the sale of which is controlled by the City, milk, butter, cereals, beverages, etc. Occasional lectures and excursions. This course is given in co-operation with the Food and Drug Inspection Laboratory of the Department of Health.

Text-books: Winton's *Course in Food Analysis* and the instructor's notes.

Prerequisite: Chemistry 50. Fall term; eight laboratory hours a week; 3 credits.

299. The Chemistry of Food and Nutrition.

Professor Cooper.

Food principles, their chemistry and functions; composition and nutritive values of food materials; the amounts of food required in nutrition; chemical methods of determining the nutritive values of foods, standards for food products.

Prerequisite: Chemistry 50; Chemistry 55 is desirable. Spring term; lectures and laboratory seven hours a week; 3 credits. Fee, $17.50.

***246. Technology of Fuel and Gas.** *Professor Stevenson.*

Analyses and tests of solids, liquids, and gases to determine their fitness and value as combustible and explosive fuels. Fuel value determinations with calorimeters. Study and classification of fuels, their properties and the methods of using them. The standard methods of gas analysis. Standard texts.

A—Solids—First five weeks.
B—Liquids—Second five weeks.
C—Gases—Last five weeks.

Prerequisite: Chemistry 4. Fall term; lectures and laboratory work eight hours a week; 3 credits. Fee, $20.

Regular students may take only the complete course. Municipal students may elect any or all of the subdivisions.

***249. Potable and Industrial Water.**

Professor Browne and Instructor to be announced.

This course differentiates between various waters, considering them from industrial and hygienic standpoints; for example, softening, filtering and purifying. Water analyses are made in laboratory. The work, which is done in conjunction with the Department of Hygiene, is divided into three groups.

A. Industrial Water
B. Potable Water } Given in the Chemistry Department.
C. Water Bacteriology. Given in the Hygiene Department.

Prerequisite: Chemistry 4 and Biology 41; Chemistry 260 is desirable. Spring term; lectures and laboratory seven hours a week; 3 credits. Fee, $17.50. Municipal students may elect any or all of the three divisions.

269. Chemistry of Commerce. *Instructor to be announced.*

In general this course involves the economics of production and disposition of chemical products. It treats of the sources of raw materials utilized in the chemical industry; directs attention to the countries from which raw, intermediate, and finished products may be imported or to which they may be exported; it treats of the methods by which such materials are made ready for handling in shipping, the channels through which the crude materials may be obtained and finished products disposed of. The lectures also consider the problems of sources of energy and conservation of wastes in the utilization of by-products. The patent laws involved receive due consideration.

Seminar work on the economic history of the development of various chemical industries, domestic and foreign, is carried on by the study of the consular reports and through the use of the Wolcott Gibbs, Chemists' Club, and New York City Libraries. Selected reports, prepared by students, are presented by them to the class for criticism and comment.

Prerequisite: a knowledge of chemistry equivalent to Chemistry 260 and 265 of the College Course. Spring term; lectures, seminar and library, five hours; 2 credits. Fee, $12.50.

262. Industrial Chemistry for Engineers other than Chemical Engineers. *Professor Moody.*

This is a lecture and seminar course (with parallel reading) especially adapted for students who aim to become civil, electrical, or mechanical engineers. Its purpose is, without going deeply into chemical manufacturing, to show the chemistry involved in a limited field of engineering, especial emphasis being laid upon apparatus types used in selected processes. Such topics as metallic corrosion and its prevention, paints (composition and service), wood preservation, cements, water-proofing, fire prevention and

fire-proofing, asphalts, oils, and abrasives, which serve as illustrations of the subjects of importance to all engineers, will be studied.

This subject is open only to those students pursuing the courses leading to the degree of Civil, Electrical or Mechanical Engineer, and qualified *Municipal Students.*

Prerequisite: Chemistry 3. Fall term; lectures three hours a week with assigned reading; 3 credits. Fee, $7.50.

***111. Advanced Inorganic Chemistry.**

Professors Baskerville and Estabrooke.

This course is intended for students intending to specialize in chemistry or chemical engineering.

Prerequisite: Chemistry 4 and 33. Spring term; one recitation and five laboratory hours a week; 3 credits.

The *Library* and *Museum of Chemistry* are described on p. 80. Students in the School of Technology are eligible for membership in the *City College Chemical Society* and for departmental certificates.

ECONOMICS

***150. Business Organization.**

Offered in the School of Business and Civic Administration; required in all the Engineering curricula; for description, see p. 166.

ENGINEERING

CIVIL ENGINEERING

***CE 101. Theory of Surveying.**

The fundamental principles of surveying. The construction, adjustment and use of surveying instruments. Methods of surveying for distance, area, profile and topography. Base line measurement and triangulation work; trigonometric and barometric leveling; setting grade, slope and construction stakes and computing earthwork; determining the true meridian, latitude and longitude by astronomical observations. Two hours a week are devoted to field practice, in which the manipulation of the various instruments is taught and traverses are run with compass, transit, tape and level. Problems in the reduction of actual field notes are solved by the students.

Prerequisite: Plane Trigonometry. Spring term, three recitations and two field work hours a week; 3 credits.

***CE 202. Practical Surveying** (First Summer Camp).

This course consists of thirty days' continuous field work at Van Cortlandt Park during the summer months, with weekly conferences during the fall term.

The transit and level are adjusted by each student and five traverses are run: (1) differential and reciprocal leveling; (2) survey for area and deed description; (3) the computation and location of a simple curve with inaccessible P. T. or P. C.; (4) survey of a borrow pit and a spoil bank; (5) lay-out of construction stakes for a building foundation.

The remainder of the work consists of four surveys: (1) complete preliminary survey for a proposed road; (2) topographic traverse of a portion of Van Cortlandt Park, including part of the lake; (3) repetition traverse for distances and angles; (4) determination of meridian and of latitude.

Prerequisite: CE101. Summer: 30 clear days in June and July. Fall term, three hours a week of conference, computation, lectures and quiz; 7 credits. Fee, $7.50.

***CE 203. Practical Surveying** (Second Summer Camp).

Two large traverses will be run.

1. Railroad Survey. The preparation of all plans, maps, and specifications for the preliminary work in building a railroad right of way.

2. Topographic-Hydrographic Survey. This will cover the entire southern portion of Van Cortlandt Park. The work will consist of triangulation for control by geodetic methods and observations. The location of topographic detail will be accomplished by plane table and military sketching methods.

Thirty clear days in August and September; 5 credits. Fee, $10.

***CE 110. Materials of Construction.**

In this course will be considered the materials of construction, their use and suitability, together with tests and inspection. The materials studied will be those falling under the four broad classifications of (1) masonry materials, including limes, cements and concrete; (2) ferrous metals, pig, cast and wrought iron, and steel; (3) timber; (4) street pavement and highway materials.

Three hours, recitations and lectures, and two hours a week in the testing laboratories; 3 credits.

***CE 111. Mechanics of Materials.**

This is the fundamental course in Mechanics of Materials and Applied Statics. The topics treated include the following: Hooke's law, common theory of flexure, analysis and design of simple beams, columns, struts and girders; bending moments, shears, and deflections in beams of various types; and reinforced concrete design.

Prerequisite: Physics 12. Co-requisite or prerequisite: CE110. Five hours a week; 3 credits.

***CE 120. Hydraulics.**

The principles of hydrostatics and hydrokinetics with their applications to the measurement of head, pressure and flow;

gauges and manometers; equilibrium of floating bodies, stability of dams against water pressure; Venturi meter, Pitot tube, current meters, floats, weirs; loss of head and flow through pipes, orifices, nozzles; flow in channels; backwater; elements of flow in compressible fluids.

Prerequisite: Physics 12. Spring term, three hours a week; 3 credits.

***CE 221. Hydraulics, Laboratory.**

An experimental investigation and demonstration of the basic hydraulic phenomena. The use and calibration of weirs, meters, Pitot and Venturi tubes, nozzles and orifices. The testing of miscellaneous hydraulic apparatus.

Co-requisite or Prerequisite: CE 120. Spring term, three hours a week; 2 credits. Fee, $7.50.

***CE 222. Materials Laboratory.**

Tests on concrete beams, reinforced concrete slabs, large wooden and metal beams and columns. Shearing tests on rivets and structural members.

Prerequisite: CE 110. Spring term, three hours a week; 2 credits. Fee, $7.50.

***CE †223, 233. Graphics: Framed Structures.**

Analysis of simple roof trusses; the force diagram; the funicular polygon. Roof with one end free; with fixed ends. Snow and wind loads. Graphical solution of a traveling crane problem. Graphical solution of stresses in bridge trusses. Lecture and recitation work supplemented with drafting room practice.

Prerequisite: CE 110. Prerequisite or co-requisite: CE 111. Spring and fall terms, four hours a week; 4 credits. Fee, $10 each term.

***CE 224. Pavements.**

Preliminary consideration. Types of roads and pavements. Materials used. Functions of a pavement. Traffic census. Preliminary surveying and planning. Preparation of the subgrade. Drainage. Surfacing methods. Dirt roads, bituminous macadam and bituminous concrete. Water-bound macadam. Concrete roads. Sheet asphalt and asphalt block. Brick, granite block and wood block pavements. Subsurface work. Curbs and gutters. Maintenance methods. Street cleaning.

Prerequisite: CE110. Spring term, three hours a week; 2 credits. Fee, $7.50.

***CE 225, 235. Masonry and Foundations.**

Theory of earth pressure; bearing power of soil and rock. Design of a retaining wall of concrete, and alternate design of reinforced concrete. Piles and pile foundations. Capping of piles. Concrete vs. wood piles. Design of a gravity dam. Subaqueous

foundations. Design of bridge pier and pneumatic caisson. Spread footings. Foundations for tall buildings. Drafting room practice.

Prerequisite: CE 110. Spring term, two recitations and three drafting hours a week; 3 credits. Fee, $7.50. Fall term, two recitations and three drafting hours a week; 3 credits. Fee, $7.50.

***CE 226, 236. Railroads.**

Simple curves; curves with inaccessible P. I. P. T.; compound and reverse curves. The transition or spiral. Preparation for grading. The mass curve. Preliminary computation of earth work. Preparation of the roadbed. Ties, metal and wood. Track fittings; fish plates, bolts, rails. Methods of rail laying; switches; frogs, turnouts; sidings. Tractive effort. Maintenance of ways. Repairs; spur tracks.

Prerequisites: CE 110 and 111. Spring and fall terms, four hours a week; 6 credits. Fee, $10 each term.

***CE 232, 242. Bridges.**

Types of bridges; external loads, moving, dead and wind loads. Types of moving load. E 50 and E 60 loading. Preparation of stress sheet. Criteria for moving loads. Design of stringer, floor beam. Riveted connections. Detailing of main members together with preparation of shop drawings. Lectures and recitations supplemented by design and drafting practice.

Prerequisite: CE 223. Co-requisite: CE 233. Fall and spring terms, five hours a week; 6 credits. Fee, $12.50 each term.

***CE 243. Water Supply; Sewers.**

Rainfall, rate of saturation and run off. Water census. Impounding of waters. Various types of dams. Aqueducts. Flow through pipes and aqueducts. Distributing systems. Filter methods. Methods of purification. Water meters and water consumption. Sewers. Design and construction. Disposal of waste. Separate system. Combined system.

Prerequisites: CE 120 and 221. Spring term, four hours a week; 3 credits. Fee, $10.

***CE 244. Tunneling and Excavation.**

The movement of large quantities of earth in excavation. Preliminary exploration work. Test pits. The diamond drill; the calyx drill. Methods of wash boring. Shaft sinking methods. Turning the heading. Drills, explosives. Method of driving, excavation of heading and bench. Drainage, lining. Methods of surveying and measurement.

Prerequisite: CE 203. Spring term, five hours a week; 3 credits. Fee, $12.50.

***CE 245. Reinforced Concrete.**

Elementary principles of reinforcing concrete. Methods of mixing and laying. Types of reinforcing rods and plates. Ana-

lytical design. Placing of rods. Computation of stresses in a reinforced concrete beam. Reinforced concrete columns. Flat slab construction. Design and detailing of a reinforced concrete building.

Prerequisite: CE 111. Spring term, four hours a week; 3 credits. Fee, $10.

ELECTRICAL ENGINEERING

***EE 120. Elementary Electrical Engineering.**

Elementary theory and general construction of simple electrical machinery. Theory and experiments on electro-magnets, transformers, d. c. generators and motors, a. c. generators. Inspection and report on power plant.

Prerequisite: Physics 4 and 8. Two lectures or recitations, and four laboratory hours a week; 4 credits.

***EE 122. Electrical Measurements.**

Laboratory and field use, and calibration of ammeters, voltmeters, wattmeters, watt-hour meters, instrument transformers. Measurement of fundamental electrical constants of circuits. Commercial use of certain instruments.

Prerequisite: Physics 11. Spring term, three laboratory hours a week; 2 credits.

***EE 124. Alternating Currents.**

More advanced theory of a. c. circuits and machinery. Basic definitions and formulas, and symbolic and graphic forms of representation for alternating currents. Solution of circuits. Theoretical design and calculation of transformers, induction motors, alternators, synchronous motors, and rotary converters.

Prerequisite: Physics 11. Spring term, three hours a week; 3 credits.

***EE 230. Direct Current Machinery.**

Continuation of EE 120. Study and comparison of d. c. motors and generators. Laboratory tests for regulation, efficiency, and temperature rise. Installation, control and protective equipment, and operation of machines.

Prerequisite: Physics 11 and EE 120 and 122. Fall term, two lectures or recitations and four laboratory hours a week; 4 credits. Fee, $15.

***EE 232. Industrial Motor Applications.**

Use of motors in manufacture, building, marine propulsion, and mining. Application of constant and variable speed motors to factory machine tools. Crane motors and control systems.

Prerequisite: EE 120. Fall term, two lectures or recitations a week; 2 credits Fee, $5.

***EE 233. Illuminating Engineering.**

Theory of light distribution and measurements, and factors governing the choice of illuminants. Illuminating characteristics of incandescent lamps and arcs. Modification of lighting by reflectors, wall tints, surface quality. Maintenance of lighting systems and useful life of lamps.

Prerequisite: EE 120. Fall term, two lectures or recitations a week; 2 credits. Fee, $5.

EE 234, 244. Electrical Design.

Design of motors, generators, switchboards, and other forms of electrical apparatus. Choice and installation of measuring instruments and control equipment. Factory methods of design and construction, and drafting room, model shop, and production routine.

Co-requisites: EE 230 and 240. Fall and spring terms, four hours a week; 4 credits. Fee, $10 each term.

***EE 235. Telegraph and Telephone Engineering.**

For students of "Communication Engineering." Principal devices used in telegraphy, telephony, automatic telephony, multiplex high speed telegraphy, and cable telegraphy. Magneto, common battery, and automatic telephone centrals. Lectures and use of equipment in laboratory.

Prerequisite: Physics 4. Fall term, two hours a week; 2 credits. Fee, $5.

EE 136, 146. Radio Engineering.

For students of "Communication Engineering." First term: high frequency alternating current phenomena, the production, measurement, and control of such currents and of electromagnetic waves. General theory and construction of a simple radio station. Second term: modern radio system, including telephony, arc systems, vacuum tube systems, and alternator systems. Laboratory work on test and installation of various forms of radio stations.

Prerequisite: Physics 11. Fall and spring terms, six hours a week; laboratory, lecture and recitation; 8 credits. (Not given in 1920-21.)

EE 237. Power Plants.

Design, construction, and operation of power plants. Isolated plants, central station plants, automatic power plants, and hydroelectric stations. Economic questions involved in power plants, including methods of selling power and improving the load factor of the plant.

Co-requisite: EE 230. Fall term, two hours a week; 2 credits. Fee, $5.

***EE 240. Alternating Current Machinery.**

Continuation of EE 120 and 230. Study and comparison of various a. c. motors and generators. Induction motors, synchronous motors, repulsion motors, and rotary converters. Polyphase generators and motors and phase-transformations. Regulation, efficiency, and heating of a. c. machines. Installation, operation, and protective and control equipment for a. c. machines.

Prerequisites: EE 124 and 230. Spring term, two lectures or recitations and four laboratory hours a week; 4 credits. Fee, $15.

EE 242. Distribution and Transmission.

Distribution of electricity for light and power, and over short and long distances. Two and three wire d. c. systems; single, two and three phase a. c. systems. Building and city wiring layouts, and long distance high voltage distribution systems. Fire protection.

Co-requisite: EE 240. Spring term, four hours a week; 4 credits. Fee, $10.

EE 243. Electric Railroads.

Principal systems of electric traction for railroads, mines, and factories. Construction, equipment, and operation of urban, suburban, and long distance railroads. Control systems and dynamic braking. Study of recent large scale railroad electrification projects.

Co-requisites: EE 240 and 242. Spring term, two hours a week; 2 credits. Fee, $5.

MECHANICAL ENGINEERING

†ME 210. Forge and Foundry Laboratory.

The greater part of the term is devoted to forge work, which comprises exercises in pointing, turning, flattening and bending, in the making of various kinds of welds, in steel working, hardening, annealing and tempering.

Enough work in chipping, filing, molding and casting is done to familiarize the students with these operations.

Frequent talks are given on the manufacture of the different varieties of iron, their properties, defects and suitability for various purposes.

Fall term, four laboratory hours a week; 1 credit. Fee, $10.

***ME 211. Mechanical Instrument Laboratory.**

The study, calibration and use of the instruments of the engineer. Text-books: Smart, *Engineering Laboratory Practice;* Carpenter and Diedrichs, *Experimental Engineering.*

Prerequisite: Physics 3. Fall term, four hours a week; 2 credits. Fee, $10.

†ME 220. Pattern Making.

The principles of joinery and of turning are applied to the making of patterns in sufficient variety to exemplify typical patterns for small and medium-sized castings.

Prerequisite: ME 210. Spring term, eight laboratory hours a week; 3 credits. Fee, $20.

ME 221. Steam Power.

The study of furnaces, boilers, steam engines and the various accessories.

Prerequisite: Physics 12 and 13. Spring term, three hours a week; 3 credits. Fee, $7.50.

†*ME 122. Power.

A qualitative analysis of the three systems of power generation, water, steam and gas, with a study of their applicability to manufacture, transportation and mining.

Prerequisite: Physics 3. Fall term, three hours a week; 3 credits.

ME 124. Kinematics.

The graphical analysis of mechanical movements.

Spring term, one recitation and three drawing hours a week; 2 credits.

***ME 230. Machine Tool Laboratory.**

This laboratory is equipped with seventeen lathes, two planers, two shapers, two milling machines, a universal grinder, a centering machine, a sensitive drill, a radial drill, a power hack saw, a hardening and annealing oven and a double emery grinder. Over one-half the machines are provided with individual motor drive. The exercises on the lathe are graded and cover all the typical lathe operations. After the student has completed these lathe exercises, he takes up the work on the other machines and advanced lathe work. The student is required to make a careful study of each machine before being allowed to operate it.

Prerequisite: ME 220. Fall term, six hours a week; 2 credits. Fee, $15.

ME 231. Steam Power Laboratory.

Full tests are made of boilers, furnaces, steam engines, steam turbines, and steam pumps.

Text-books: Smart, *Engineering Laboratory Practice.* Carpenter and Diedrichs, *Experimental Engineering.*

Prerequisite and co-requisite: ME 211 and 221. Fall term, four hours a week; 2 credits. Fee, $10.

***ME 232. Water Power.**

The application of the principles of hydraulics to the study of water motors, chiefly impulse and reaction turbines, centrifugal pumps and miscellaneous hydraulic apparatus.

Prerequisite: CE 221. Fall term, three hours a week; 3 credits. Fee, $7.50.

***ME 233. Water Power Laboratory.**

The testing of the machines studied in Course 232.

Co-requisite: ME 232. Fall term, three hours a week; 2 credits. Fee, $7.50.

ME 234, 244. Machine Design.

The application of previously learned principles to the actual design of machinery.

Prerequisite: ME 124 and CE 110 and 111. Fall and Spring terms, six hours a week; 6 credits. Fee, $15 each term.

***ME 235. Heating and Ventilation.**

A study of the heating and ventilation of dwellings, public buildings and factories.

Prerequisite: ME 221. Fall term, two hours a week; 2 credits. Fee, $5.

ME 240. Shop Processes.

A study of the methods of production.

Prerequisite: ME 230. Spring term, three hours a week; 2 credits. Fee, $7.50.

ME 241. Power Plants.

A study of the considerations governing the design of plants for the production of power, choice of site, selection and arrangement of equipment, statistics on performance and costs.

Prerequisite: ME 231 and 233. Spring term, four hours a week; 3 credits. Fee, $10.

ME 242. Gas Power.

The study of thermodynamics with direct reference to its application to the quantitative analysis of the performance of all sorts of thermal apparatus using gas or oil as fuel.

A detailed study of the combustion of these fuels, furnaces, gas producers, gas and oil engines, miscellaneous and auxiliary apparatus.

Spring term, four hours a week; 3 credits. Fee, $10.

ME 243. Gas Power Laboratory.

Experimental study and tests of gas and oil engines with their auxiliary apparatus.

Co-requisite: ME 242. Spring term, four hours a week; 2 credits. Fee, $10.

GEOLOGY

12. Mineralogy.

Offered in the College of Liberal Arts and Science; required for the degree in Chemical Engineering or Civil Engineering; for description, see p. 98.

111. Intermediate Physical Training.

This course is planned to supply the student with such organic development and efficiency as will enable him to demonstrate successfully as a teacher various type exercises for classes in elementary and intermediate indoor and outdoor gymnastics, aquatics, games, play and athletics.

Prerequisite: Hygiene 4. Three hours a week; ½ credit.

112. Advanced Physical Training.

This course is a continuation of Course 111, and is designed for the physical equipment of teachers of more advanced physical work.

Prerequisite: Hygiene 111. Three hours a week; ½ credit.

113. Class Management.

This course supplies the practical instruction and experience needed for the training of special teachers in the management of elementary and intermediate classes in various forms of physical exercise.

Prerequisite: Hygiene 112 and Biology 32. Fall term, three hours a week; 1 credit.

114. Class Management.

This course is a continuation of Course 113. It is planned to give a training in the management of more advanced classes.

Prerequisite: Hygiene 113. Spring term, three hours a week; 1 credit.

115. Control of Emergencies and First Aid to the Injured.

This course supplies instruction concerning the management and protective care of common emergencies. The instruction is practical and rational. It covers such emergencies as sprains, fractures, dislocations, wounds, bruises, sudden pain, fainting, epileptic attacks, unconsciousness, drowning, electric shock, and so on.

Prerequisite: Biology 32. Fall term, two hours a week; 1 credit.

116. Theory and Practice of Individual Instruction in Hygiene and in Departmental Sanitation.

Students taking this subject are given practical first-hand experience of special use to teachers, (a) in connection with health examination, inspection, conference, consultation, and follow up service carried on in the departmental examining room, and (b) in connection with the sanitary supervision carried on by the department.

Prerequisite or co-requisite: Biology 32, 41 and 148. Spring term, six hours a week in two periods of three hours each; 2 credits.

*7. **Problem Work on Topics in Course 3.**

Offered in the College of Liberal Arts and Science; required in all the Engineering curricula; see p. 129.

*8. **Problem Work on Topics in Course 4.**

Offered in the College of Liberal Arts and Science; required in all the Engineering curricula; see p. 129.

*11. **Electricity** (Advanced Course).

Offered in the College of Liberal Arts and Science; required in the curriculum in Electrical Engineering; for description, see p. 129.

*12. **Mechanics** (Advanced Course).

Offered in the College of Liberal Arts and Science; required in all the Engineering curricula; for description, see p. 130.

13. **Heat** (Advanced Course).

Offered in the College of Liberal Arts and Science; required in the curriculum in Mechanical Engineering; for description, see p. 130.

THE SCHOOL OF BUSINESS AND CIVIC ADMINISTRATION

Faculty and Instructing Staff

Arranged by Departments

Sidney Edward Mezes, Ph.D., LL.D., *President*
Frederick B. Robinson, Ph.D., *Dean*

ECONOMICS

Frederick B. Robinson, Ph.D.,	*Professor*
Guy Edward Snider, Ph.D.,	*Associate Professor*
Lewis Sayre Burchard, A.B., LL.B.,	*Associate Professor*
Lynn Mateer Saxton, Pd.D.,	*Assistant Professor*
George Monroe Brett, A.B.,	*Assistant Professor*
Charles A. Houston, A.B., LL.B.,	*Assistant Professor*
Benjamin Parke DeWitt, A.M., J.D.,	*Assistant Professor*
DeWitt C. Eggleston, M.E., C.P.A.,	*Assistant Professor*
Myron A. Finke, A.B., C.P.A.,	*Lecturer*
George Kent Hinds, M.A., LL.B., C.P.A.,	*Lecturer*
William Walker Orr, A.B.,	*Lecturer*
Homer Adolph Stebbins, Ph.D., J.S.D.,	*Lecturer*
William E. Collins, A.B., LL.B.,	*Lecturer*
Samuel MacClintock, Ph.D.,	*Lecturer*
Warren M. Maule,	*Special Lecturer*
Joseph J. Klein, Ph.D., C.P.A.,	*Special Lecturer*
Albert C. Bonaschi, M.D.,	*Special Lecturer*
Lawrence W. Rogers,	*Special Lecturer*
Burtis H. Collins,	*Special Lecturer*
Rossiter Holbrook, C.E.,	*Special Lecturer*
Pierre Zaldari, B. in Sc. and Letters,	*Special Lecturer*
Leonhard Felix Fuld, LL.M., Ph.D.,	*Special Lecturer*
Robert Grimshaw, M.E., Ph.D.,	*Special Lecturer*
J. George Frederick,	*Special Lecturer*
Arthur E. Albrecht, M.A.,	*Instructor*
Meyer Parmet, B.C.S., C.P.A.,	*Instructor*
Robert H. Brown, C.P.A.,	*Instructor*
James J. Donovan, C.P.A.,	*Instructor*
Alexander L. Pugh, B.S., in Econ.,	*Instructor*
James E. Tallent, B.S., C.P.A.,	*Instructor*
David A. Embury, A.B., LL.B.,	*Instructor*
Frank E. Mandel, B.S., C.E., C.P.A.,	*Instructor*
Oscar J. Sufrin, B.C.S., C.P.A.,	*Instructor*
A. M. Fox, C.E.,	*Instructor*
Charles R. Taylor, B.C.S.,	*Instructor*
John R. B. Byers, B.S. in Econ., M.S.,	*Instructor*
William H. Burns,	*Special Instructor*
Benjamin Freeman, A.B., C.P.A.,	*Special Instructor*
Conrad J. Saphier, M.C.S.,	*Special Instructor*
David Berk, B.S.,	*Tutor*
Benjamin L. Blau, B.S.,	*Tutor*
Benjamin Harrow, B.A., C.P.A.,	*Tutor*
Meyer J. Ostrow, C.P.A.,	*Tutor*

Ulysses S. Tasch, A.B., LL.B., C.P.A.,	*Tutor*
William T. Van Alstyne, Ph.B., LL.B.,	*Tutor*
Louis Weinstein, B.C.S., C.P.A.,	*Tutor*
George Dariff, B.C.S., C.P.A.,	*Tutor*
John M. Connolly, B.A.,	*Tutor*
Hugh W. Adams, Jr., LL.B.,	*Tutor*
Abraham Y. Cowen, A.B.,	*Tutor*
John Horace Mariano, Ph.D.,	*Tutor*
Jos. M. Cunningham, B.S. in Econ.,	*Tutor*
Henry N. Barker, A.B., LL.B.,	*Tutor*
Simon Bachrach, A.M., LL.B.,	*Tutor*
Alfred L. Hoffman, A.B., LL.B.,	*Tutor*

EDUCATION

[1]Stephen Pierce Duggan, Ph.D.,	*Professor*
Paul Klapper, Ph.D.,	*Associate Professor*

ENGLISH

Lewis Freeman Mott, Ph.D.,	*Professor*
Harry C. Krowl, Ph.D.,	*Associate Professor*
Howard C. Green, A.B.,	*Instructor (Business English)*
Michael J. Keleher, A.M.,	*Instructor (Business English)*
Joseph X. Healy, A.M.,	*Instructor (Business English)*
Bernard Sobel, B.S., Ph.B., M.A.,	*Tutor (Business English)*

FOREIGN LANGUAGES

Charles A. Downer, Ph.D.,	*Professor*
Camillo von Klenze, Ph.D.,	*Professor*
Ventura Fuentes, M.D.,	*Associate Professor*
Americo Ulysses N. Camera, Ph.D.,	*Assistant Professor*
Alfonso Arbib-Costa, Dipl.,	*Instructor*
Rafael Marin, B.S.,	*Special Instructor*
Abraham Yarmolinsky, A.B.,	*Instructor*
John Castro, Dipl.,	*Tutor*

GOVERNMENT AND SOCIOLOGY

William B. Guthrie, Ph.D.,	*Associate Professor*

HISTORY

Nelson P. Mead, Ph.D.,	*Associate Professor*
Holland Thompson, Ph.D.,	*Associate Professor*

MATHEMATICS

Maximilian Philip, Sc.D.,	*Assistant Professor*

PUBLIC SPEAKING

Erastus Palmer, A.M.,	*Professor*
Daniel W. Redmond, Ph.D.,	*Associate Professor*
Arthur James Weston, A.B., A.M.,	*Instructor*
Thomas E. Coulton, A.M.,	*Tutor*

STANDING COMMITTEES

Curriculum: Professor Mott, Chairman; Dean Robinson, Professors Guthrie, Fuentes, Snider, Brett, and Houston.

Course and Standing: Dean Robinson, Chairman; Professors Krowl, Mead, and Houston and Mr. Hinds.

[1] Absent on leave.

Courses in the Several Departments

Starred courses are offered in both the Day and Evening Sessions during the year 1920-1921. *Courses marked* (‡) *are offered only in the Evening Session. Courses marked* (†) *were offered in the Summer Session of* 1920.

For a statement of the curricula in the School of Business and Civic Administration, see pages 46-50.

ECONOMICS

PRINCIPLES, HISTORY AND PROBLEMS

†*1. Elements of Economics.

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 85.

†*2. Evolution of Industry.

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 85.

11. Problems in Political Economy.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 85.

***12. Resources and Industries of the United States.**

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 85.

13. Labor and Employment Problems.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 86.

†*20. Money and Banking.

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 86.

25. Public and Municipal Finance.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 86.

***65. Insurance.**

Offered in the College of Liberal Arts and Science; elective in the School of Business and Civic Administration; for description see p. 86.

70. Foreign Exchange and the Financing of Foreign Trade.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 86.

***150. Business Organization.**

The economic bases of business. Types of business organization: individual ownership, partnership, joint stock, corporation, combination. Organization plans. Organizing new enterprises: discovery of business opportunity, analysis, promotion, formulation, scientific location, design, standard plant, equipment and organization. Plant organization: factory, railroad, store, etc. Office organization. Sales organization. Fundamentals in effective organization. Studies in organization of various kinds of enterprises. Lectures, assigned readings, reports and extensive use of organization materials. Field studies of operating concerns.

Fall term, three hours a week; 3 credits.

155. Advertising.

History of advertising; creative power of advertising; mediums employed; means of securing action; good copy; pictorial, outdoor, magazine, newspaper and mail order advertising; planning a campaign; advertising manager; advertising agencies; follow-up systems; office records; analyzing results.

Text-book, lectures, assigned readings, reports and practical work.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

156. Marketing Methods and Salesmanship.

Trade factors and trade channels; selling at retail; competition; selling by mail; the jobber; the selling process; human appeals; the salesman's duties; co-operation; selecting salesmen; training salesmen; effective selling methods; psychology of salesmanship.

Text-books, lectures, assigned readings, reports and practical work.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

173. South American Markets. *Professor Snider.*

Factors in foreign business competition for South American trade: investments, freight rates, comparative costs, commercial

and financial organizations, and cultural relations. Factors in development of the markets; natural resources, land ownership, social classes, customs and characteristics, purchasing power and standards of living. Lectures, discussions, reports, collateral reading.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

175. Business Methods in Foreign Trade: Marketing.
Professor Snider.

This course includes a study of terms of sale, methods employed in selling, the functions of the factors, foreign advertising, governmental regulations, customs, tariffs, export and import control, the sources of information and service, foreign competition, the fundamental principles of international trade. Text, lectures, reports, collateral readings, problems and practice.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

176. Business Methods in Foreign Trade: Technique.
Professor Snider.

This course includes a study of the documents, paper work, freight rates and routings, chartering, consular and customs requirements, terminals and port facilities; marine and war risk insurance; trade routes of the ocean-borne traffic of the world. Lectures, collateral readings, problems and practice.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

***250. Business Management.**

The problems of successful business operation. Importance of the management factor. Fundamentals in successful administration. Management in construction and operation; equipment and technique; records and analysis; organization and administration. Efficiency units: materials, processes, personal services. Plant management: lay-out, equipment, personnel, power, stores, etc. Office management: accounting and statistical records, cost analyses, mechanical aids, clerical personnel, etc. Sales management: marketing programs, sales campaigns, advertising methods, credit and collections. The scientific management movement. Efficiency reorganization. Studies in the management of special types of enterprises. Lectures, assigned readings, reports and extensive study of management plans of going concerns. Field studies of well-managed enterprises of a number of types.

Spring term, three hours a week; 3 credits. Fee, $7.50.

‡255. Practical Advertising. *Mr. Holbrook.*

A practical course dealing with the nature of advertising, its application to various types of business and the methods

employed in connection with general merchandising and sales direction.

Two hours a week; 2 credits. Fee, $10.

‡256. Selling. *Mr. Rogers.*

A course designed to give the student a grasp of the technique of salesmanship in all departments of commercial activity.

Two hours a week; 2 credits. Fee, $10.

‡257. Sales Management. *Mr. Frederick.*

A course dealing with the problems of sales management in the fields of wholesale and retail commerce.

Fall term, two hours a week; 2 credits. Fee, $10.

BUSINESS LAW

†*190. Introduction to Business Law—Contracts.
Professors Burchard and Houston and others.

General legal principles underlying all business activity, and introduction to the growth and development of commercial law. Discussion of what constitutes a binding agreement, its formation, scope, and discharge. Lectures, recitations and case reports.

Three hours a week; 3 credits.

†*191. Sales Agency, Partnership, Insurance.
Professors Burchard and Houston and others.

The nature of property, and how it may be owned, conveyed, protected, acquired and transformed. Delegation of contractual powers. Non-corporative associations. Lectures, recitations and case reports.

Prerequisite: Economics 190. Fall term, 1920; three hours a week; 3 credits.

†*192. Corporations, Negotiable Instruments, Equity.
Professors Burchard and Houston and others.

Nature and scope of a corporation and the legal organization of modern industrial forces. Bills, notes, drafts and other financial mechanisms of exchange. Outline of equitable remedies and jurisdiction. Lectures, recitations and case reports.

Prerequisite: Economics 190. Spring term, 1921; three hours a week; 3 credits.

‡290. Advanced Problems in Law for Public Accountants.

A special course in business law for advanced students, in which special topics are treated.

Prerequisite: Economics 192. Two hours a week; 2 credits; Commerce Building. Fee, $5.00.

†*130-†*131. Accounting I: Theory, Practice and Problems.
Professors Saxton and Brett and others.

The fundamental principles of accounting developed and applied with a minimum of detail. Opening and closing books and preparation of simple financial statements of a single proprietor. Accounts classified and their effect on final statements studied. Development of various forms of auxilliary books and use of columnar books and controlling accounts. Single entry illustrated, and change to double entry. Change from a sole proprietor to a partnership and departmental business.

Partnership problems in admission of a new partner; division of profits and other adjustments. Use of vouchers and voucher record. Manufacturing accounts and statements. Shipments and consignments. Single and joint ventures. Treatment of bad debts, depreciation, good will, reserve accounts, reserve funds and surplus. Preparation of balance sheets and profit and loss statements in various detailed and condensed forms. Dissolution and liquidation of a partnership as solvent and as insolvent. Sale of business to another firm and change from partnership to a corporation.

Co-requisite: Economics 1. Two terms, four hours a week; 6 credits.

†*230-†*231. Accounting II: Theory, Practice and Problems; Corporation Accounting.
Professors Saxton and Brett and others.

Procedure for incorporation of a business. Opening corporation books, various methods. Discussion of nature and use of accounts peculiar to a corporation. Dividends and their payment. Reserves and surplus. Financing a corporation. Bond issues. Nature of a bond premium and discount. Closing the books of a corporation. Financial statements of trading and manufacturing concerns. Comparative profit and loss statements and balance sheets. Principle and use of the sinking fund. Valuation of bonds and investments. Amortization of bond premium and accumulation of bond discount. Redemption of bonds—various plans. Agencies and branches. Foreign branches and agencies. Accounting for insurance and adjustment for fire losses. Books and accounts for clubs and professional men. Consolidations and combinations, by merger, by lease, and by holding companies. Consolidated balance sheets and profit and loss statements. Reorganization of a corporation. Dissolution and liquidation, voluntary and through bankruptcy. Statement of affairs and realization and liquidation.

Prerequisite: Economics 1, 130 and 131. Two terms, four hours a week; 6 credits. Fee, $10 each term.

*232. **Principles of Cost Accounting.** *Professor Eggleston.*

A fundamental course in principles of cost accounting and methods of their applications to various types of industries.

Two hours a week; 2 credits. Fee, $8.

‡233. **Advanced Cost Accounting.** *Professor Eggleston.*

An intensive study of cost accounting systems in certain selected industries.

Two hours a week; 2 credits. Fee, $8.

‡234. **Municipal Department Accounting in the City of New York.** *Mr. Brown.*

A special study of the accounting system of the City of New York, including a detailed analysis of the departmental forms of records in actual use.

Two hours a week, in the Municipal Building; 2 credits. Fee, $8. For city employees, $5.

‡235. **Municipal Accounting, General.**

A general course in methods of handling municipal accounts.

Two hours a week, in the Municipal Building; 2 credits. Fee, $8. For city employees, $5.

‡236. **Municipal Statistics.**

A course dealing with the principles of statistics and their application to the problems which arise in city management.

Two hours a week, in the Municipal Building; 2 credits. Fee, $8. For city employees, $5.

*237-‡238. **Auditing.**

The auditing of the most important divisions of accounts, together with the procedure of typical forms of business organizations.

Two terms, two hours a week; 4 credits. Fee, $10 each term.

‡239. **Accounting Systems.** *Mr. Finke.*

The principles underlying the establishment of complete accounting and office systems in typical forms of business organizations.

Two hours a week; 2 credits. Fee, $8.

‡240. **Public Utilities Accounting and Statistics.** *Mr. Fox.*

This course deals principally with the accounting classifications of the Interstate Commerce Commission for railroads and the New York Public Service Commission's for other public utilities, the statistical requirements of the commissions and the forms of annual reports.

Two hours a week; 2 credits. Fee, $10.

‡241. Public Utilities Accounting and Regulation.

This course deals with the special accounting problems presented by the valuation of public utilities, regulations of security issues and rate making.

Two hours a week; 2 credits. Fee, $10.

‡242. Judicial Accounting. *Mr. Hinds.*

A study of judicial accounting, including testamentary accounting, executors' and administrators' accounts and bankruptcy accounting.

Two hours a week; 2 credits. Fee, $10.

‡243-‡244. Advanced Accounting Theory and Problems. *Mr. Finke.*

This is a final course designed to give the student power in applying accounting theories to the solution of the most advanced and difficult problems.

Two terms, two hours a week; 4 credits. Fee, $10 each term.

FINANCE

‡220-‡221. Business Finance. *Mr. Fox.*

A study of the principles and practices of financing business concerns, with especial attention to corporations. The obtaining of capital by individuals, partners and corporations; short and long term loans, securities of various sorts and considerations which should govern in determining their particular forms. Capitalization. Investments. Inter-business relations. Internal business finance; determination of income and the distribution of profits. Stockholders' rights, insolvency, receivership, reorganization.

Two terms, two hours a week; 4 credits. Fee, $8 each term.

‡222-‡223. Domestic Credits. *Mr. Orr.*

The course treats the problems of commercial credits from the point of view of the "credit man."

Two terms, two hours a week; 4 credits. Fee, $6 each term.

FOREIGN TRADE

‡270. Foreign Exchange Practice. *Mr. Zaldari.*

A brief analysis of the various items of debt one country incurs with another and the methods of settlement. Causes and meaning of fluctuations in rates of exchange. Methods of buying and selling exchange; cable transfers; bills of exchange; letters of credit; arbitrage transactions, etc. The computations involved. Text, lectures and problems.

Spring term, two hours a week; 2 credits. Fee, $6.

***271. Market Geography.**

A study of foreign markets with the emphasis upon trade channels, purchasing power, market demands, national characteristics, credit conditions, transportations, industries, financial and general economic conditions. Lectures, reports, discussions. "Daily Commerce Reports" and other government reports will be used as texts.

Two hours a week; 2 credits. Fee, $6.

‡272. Foreign Credits and Financing Foreign Trade. *Mr. Orr.*

Credit conditions in several foreign markets, sources of credit information, the financing of exports and imports, price quotations in foreign moneys, etc. Text, lectures, reports, discussions.

Two hours a week; 2 credits. Fee, $6.

‡273. South American Sales Problems. *Professor Snider.*

An advanced course for those familiar with the fundamentals of foreign trade. A salesman's trip will be followed through the principal markets; his difficulties, methods, and actual trade connections will be discussed. The lines carried will be those which are sold sometimes to the retailer and sometimes to the jobber, depending upon market conditions. The emphasis will be placed upon the marketing of boots and shoes and hardware.

Two hours a week; 2 credits. Fee, $6.

‡274. Russian Markets.

The American-Russian Chamber of Commerce in co-operation with the College will conduct a series of lectures on Russia. These lectures will be given by men who have a thorough knowledge of their subject. The lectures will cover the commercial, industrial and financial phases of the Russian markets, and also the cultural psychological, historical and economic foundations.

Two hours a week; 2 credits. Fee, $6.

‡275. Foreign Sales Practice. *Professor Snider.*

An introductory course in foreign sales organization and the study of foreign markets. Export trade channels, the export middleman, direct sales agencies, advertising, etc.; governmental regulations, customs, tariffs, export and import control, the sources of information and service, foreign competition and the fundamental principles of international trade. Text, lectures, reports, discussions.

Two hours a week; 2 credits. Fee, $6.

‡276. Export Technique. *Mr. Maule and Professor Snider.*

A beginner's course, covering the office practice of export

houses; practice work in making out documents and the legal and trade significance of the documents. Lectures, text, practice.

Two hours a week; 2 credits. Fee, $10.

‡277. **Exporters' Problems.** *Mr. Maule.*

Advanced course for persons in the export business.

One hour a week; 1 credit. Fee, $5.

‡278. **Practical Steamship Operation.**

Organization of ocean transportation service; the shipowner, operator, agent, broker, freight broker, marine insurance, broker and adjuster; job analysis of the work in the several organizations; practice work and explanations of legal and commercial aspects of the documents used in ocean transportation; typical operations in chartering and operation of a vessel; charter parties, cargo, plans, ships husbandry, insurance; government relations to shipping.

Two hours a week; 2 credits. Fee, $10.

‡279. **United States and Foreign Customs Administration.**

Two hours a week; 2 credits. Fee, $6.

‡280. **Export and Import Control.**

An advanced course for export managers and clerks covering the administrative practice of the War Trade Board and the office practice of the exporter in regard to export licenses. The War Trade Board Journal will be used as the text.

Two hours a week; 2 credits. Fee, $6.

ENGLISH

‡†201-‡†202. **Business English Composition.**

Exercises developing fundamental principles of grammar and rhetoric with applications to business correspondence, reports, including letters of application, order, receipt, acknowledgment, claim, adjustment, introduction, recommendation, sales, advertising, form circular, official, follow-up, etc. Letters will be written, read, criticised and re-written. Paragraph and essay writing in class and at home. Text-books and class notes are used as the bases of instruction.

Two terms, two hours a week; 4 credits. Fee, $5 each term.

FOREIGN LANGUAGES

FRENCH

*111. **Commercial French.**

A preliminary study of commercial French. Reading of texts

dealing with commercial subjects. Business forms, documents, expressions. Exercises in correspondence.

Prerequisite: two years of French. Fall term, three hours a week; 3 credits.

*112. **Commercial French**—Continued.

General notions of commerce. Divisions, office organization, buying and selling, advertising, monetary systems, banking, exchange, custom house transactions. Commercial reports and reviews are read. Exercises in correspondence.

Prerequisite: French 111. Spring term, three hours a week; 3 credits.

GERMAN

111. Commercial German.

Acquisition of a commercial vocabulary in writing and speaking. Kuttner's *Commercial German,* Part I.

Prerequisite: two years of German. Fall term, three hours a week; 2 credits.

112. Commercial German—Continued.

Reading and writing of commercial forms and documents. Kuttner's *Commercial German,* Part II, and commercial newspapers and reports.

Prerequisite: German 111. Spring term, three hours a week; 2 credits.

ITALIAN

‡201-‡202. Commercial Italian.

1. A beginner's course in grammar, conversation, reading and writing of Italian.

2. Grammar continued, reading of modern texts, newspapers and periodicals. Business and familiar correspondence. Practice in conversation. Commercial geography of Italy. Problems of Italian immigration in the United States.

Texts: Arbib-Costa's *Italian Lessons* and *Advanced Italian Lessons.* A modern play or novel.

Two terms; three hours a week; 6 credits. Commerce Building. Fee, $7.50 each term.

PORTUGUESE

‡201-‡202. Commercial Portuguese.

1. Grammar and reading of easy texts. Practice in conversation.

2. Grammar. Reading of texts dealing with commercial subjects. Commercial geography of Brazil and Portugal. Business correspondence.

Texts: Brenner's *Portuguese Grammar*, Goodell's *Portuguese Commericial Reader*.

Two terms; three hours a week; 6 credits. Commerce Building. Fee, $7.50 each term.

RUSSIAN

‡201-‡202. Commercial Russian.

This course is designed to teach the beginner to understand and speak the language within easy, colloquial limits and also to impart some knowledge of national manners and customs. Practical conversational methods will be used, yet the work will be systematized and guided by regular text book arrangements and study. Though grammatical rules and paradigms will not be taught at the beginning, they will be developed later, by analysis. Persons who have previously studied this language may profit by the course as a review.

Two terms; three hours a week; 6 credits. Commerce Building. Fee, $7.50 each term.

SPANISH

***111. Commercial Spanish.**

A preliminary study of commercial Spanish. Reading of texts dealing with commercial subjects. Business forms, documents and expressions. Exercises in correspondence.

Prerequisite: Two years of Spanish. Fall term, three hours a week; 3 credits.

***112. Commercial Spanish**—Continued.

General notions of commerce. Divisions, office organization, buying and selling, advertising, monetary systems, banking, exchange, custom house transactions. The reading of commercial reports and reviews. Exercises in correspondence.

Prerequisite: Spanish 111. Spring term, three hours a week; 3 credits.

GOVERNMENT AND SOCIOLOGY

11. American Constitutional Law.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 104.

12. International Law.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 104.

14. Comparative Government.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 104.

***15. State Legislation and Administration.**

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 105.

***16. Administrative Law in the United States.**

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 105.

***23. Municipal Administration.**

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 106.

†*5. Elements of Sociology.

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 106.

57. Statistics.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 107.

HISTORY

†*3. Contemporary European History.

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 108.

***4. The United States Since 1876.**

Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 108.

34. Contemporary American Problems.

Offered in the College of Liberal Arts and Science; elective in the School of Business and Civic Administration; for description, see p. 110.

36. Development of the State and City of New York.

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 111.

***39. Development of the South American States.**

Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 111.

MATHEMATICS

***120. Mathematical Theory of Investment.** *Professor Philip.*
Text-book: Skinner, *The Mathematical Theory of Investment.*
Prerequisite: completion of the prescribed mathematics. Fall term, two hours a week; 2 credits.

PHILOSOPHY

†*5. General Psychology.
Offered in the College of Liberal Arts and Science; prescribed in the School of Business and Civic Administration; for description, see p. 125.

54. Psychology of the Volitional Processes.
Offered in the College of Liberal Arts and Science; group elective in the School of Business and Civic Administration; for description, see p. 126.

PUBLIC SPEAKING[1]

†*1. Principles of Expression.
Offered in the College of Liberal Arts and Science; prescribed in the curriculum in Accountancy; for description, see p. 132.

†*5-†*6. Debate.
Offered in the College of Liberal Arts and Science; prescribed in the curriculum in Accountancy; for description, see p. 133.

†*7. Extemporaneous Speaking.
Offered in the College of Liberal Arts and Science; prescribed in the curriculum in Accountancy; for description, see p. 134.

[1] For the degree of M.B.A., Public Speaking 1-8 are all prescribed.

SPECIAL COURSES

All students taking special courses, and also all non-matriculated students (mature persons who have not met the regular entrance requirements but are permitted to take particular courses without credit toward a degree), pursuing regular courses in the Evening Session of the College of Liberal Arts and Science, the School of Technology, and the School of Business and Civic Administration, are listed separately.

Non-matriculated students are required to pay fees as follows, except where special fees are indicated in the description of particular courses:

The registration fee of $10.00 *entitles the student to instruction for a full collegiate year in courses not to exceed two hours of attendance a week each term. Additional attendance hours per week each term are charged for at the rate of* $2.50.

Government employees may be admitted to courses as non-matriculated students upon payment of smaller fees, as follows:

Registration fee of $10.00 *a term for a schedule of six credit hours. For each additional credit hour, per term, an additional charge of* $1.25 *is made, but if a student takes a schedule of less than* 6 *hours, his registration fee is reduced by* $1.25 *for each such hour less than six.*

An additional fee of $1.00 *is charged for registration after the beginning of recitations and for re-registration when a student changes his schedule of courses after it has been approved and registered.*

VOCATIONAL AND PROFESSIONAL COURSES RELATED TO BUSINESS.

Federal and State Income Taxes. *Dr. Joseph J. Klein.*

This course is designed to meet the needs of business men and women, lawyers, accountants, revenue agents, and tax officials.

Its scope includes the history of federal and state income tax legislation, and the administration of the federal and state laws, with their particular applications.

Special research work is assigned to advanced students.

Two hours a week. Commerce Building. Fee, $10.

Journalism. *Mr. Kaltenborn.*

I. Reportorial and Editorial Course.

The topics of this course are:

(1) News sources, (2) interviewing, (3) preparing copy, (4) news values, (5) newspaper departments, (6) editorials,

(7) criticism and review, (8) press agents, (9) the New York press, (10) the business office.

Two terms, two hours a week. Brooklyn Branch. Fee, $12 each term.

II. Current Events and News Analysis.

This course will deal with all phases of current history treated by the daily press. The leading events of the week will be summarized and explained, special attention being given to news of national and international importance. References will be made to the leading topics of the day in the world of art, music drama and literature. The written work of the course will include reports, criticisms and editorials on those topics in which the student is particularly interested. Some of the best examples of contemporary writing as well as the work of the students themselves will be analyzed in the classroom.

Two terms, two hours a week. Brooklyn Branch. Fee, $16 each term.

Civics for Women. *Professor Fradenburgh.*

With the privilege and duties of the franchise, women voters are seeking more complete information concerning our local, state and national government. This course is designed to acquaint them with the political machinery, as well as with the social life of the community. It may assist them in exerting their influence effectively in the governmental control of individual and group welfare.

Two terms, two hours a week. Brooklyn Branch. Fee, $5 each term.

Cost Reduction. *Dr. Grimshaw.*

A course for manufacturers and business men on practical methods of reducing costs.

Two hours a week; Fall term. Commerce Building. Fee, $10.

Investments. *Dr. Fuld.*

This course is designed to familiarize the students with different kinds of investment and the purposes and advantages of each.

Two hours a week. Commerce Building. Fee, $8.

Bookkeeping and Office Practice. *Mr. Jason.*

A special course designed to prepare persons of average intelligence, in a short time, to qualify for office bookkeeping positions under the head bookkeeper.

Six weeks, four hours a week. Commerce Building. Fee, $5.

Copy-Editing and Proof-Reading. *Mr. Levitas.*

The purpose of this course is to give the students a thorough training in the technical elements of the language.

It is intended especially for printers, proofreaders, editorial workers and writers.

Four hours a week. Main Building. Fee, $10.

Cost Estimating and Administration for Printing Shops. *Mr. Levitas.*

This course is designed to acquaint the students with the methods and customs of the modern printing office. The various equipments and materials used in the printing product—type, presses, etc.—are thoroughly analyzed and their values ascertained.

The course goes into the elements of cost and how to find them. The cost of every phase of production and the value of each process is considered and estimated.

Two hours a week. Main Building. Fee, $5.

Typography and Advertising. *Mr. Levitas.*

The object of the course is to teach accurate typography. Consideration is given to the various elements which go to make up the display of commercial forms.

Two hours a week. Main Building. Fee, $5.

Elementary Photography. *Mr. Samuel Schwarz.*

This course, which is principally intended for the amateur photographer, has for its aim the teaching of the most elementary principles of photography. It covers those salient features of the art which are so important for the production of good pictures.

The various methods of developing, printing and the after-treatment of the negative as well as the positive will be fully covered. Laboratory and dark-room work will be a feature of this course.

Two hours a week. Main Building. Fee, $7.50.

Intermediate Photography. *Mr. Schwarz.*

In this course the more advanced stages of photography will be covered and discussed. The chemistry of photography, composition, pictorial photography, portraiture in the studio, out of doors as well as in the home, commercial photography, tinting, spotting, toning, mounting, enlarging, reducing and finishing, comprise some of the charactertistic features of the course. Ample opportunity will be afforded each student to do field and darkroom work.

Two hours a week. Main Building. Fee, $7.50.

Advanced Photography. *Mr. Schwarz.*

In this course the most advanced stages of photography are taken up, and its application in commercial as well as scientific and professional branches.

Two hours a week. Main Building. Fee, $7.50.

Business English, Special. *Mr. Keleher.*

English grammar is systematically reviewed; and derivatives, synonyms, spelling, and idioms are studied. In composition attention is concentrated on sentence structure; and paragraph writing is developed.

Two hours a week. Commerce Building. Fee, $5.

TEXTILES

Textiles (I). *Messrs. Arundale, Cox and Baruch.*

This is a general and comprehensive course in textiles for salesmen and other business men who handle textiles. It includes a study of cloth analysis, the various weaves, yarn manufacture, and various processes.

Ten weeks; two evenings a week. Commerce Building. Fee, $15.

Textiles (II). A. B. C.

A. Silks. *Messrs. Arundale, Cox, Baruch and others.*

The raw material is considered with its many peculiarities, together with methods of converting it into forms suitable for weaving. Importance and commercial value of silk (raw—spun—artificial). Construction of organzine, tram, and spun silk yarns. Identification, construction and characteristics of the staple silk fabrics. Yarn and cloth calculations. Analysis of samples for the purpose of determining the weave and kind of yarns used. Microscopic detection and examination of the fibers.

Twelve weeks; one evening a week. Commerce Building. Fee, $10.

B. Cotton.

Discussion of the manufacture and spinning of cotton yarn. Yarn and cloth calculations. Bleaching, mercerizing, and dyeing of cotton yarns. Study of the construction and finishing of cotton fabrics: weaves used; warp and filling patterns. Identification and characteristics of the staple cotton materials. Microscopic detection and examination of the fibers.

Twelve weeks; one evening a week. Commerce Building. Fee, $10.

C. Woolen and Worsteds.

Discussion of the processes common to woolen and worsted yarn manufacture. Uses of woolen and worsted yarns. Yarn and cloth calculations. Analysis of samples for the purpose of determining the weave and kind of yarns used. Finishing of

woolen and worsted fabrics. Characteristics of the staple fabrics. Microscopic examination of the fibers.

Twelve weeks; one evening a week. Commerce Building. Fee, $10.

COURSES IN STENOGRAPHY AND TYPEWRITING

Mr. Sugarman, Mr. Saphier, Mr. Stich and Miss Lichterman.

Intensive Elementary Stenography. (Pitman System.)

The first twelve weeks will be devoted to an intensive study of the principles of the system and their application. Dictation will be introduced from the beginning and continued throughout the study of the theory. The last four weeks will be devoted to a review of the principles and to the development of speed in note-taking and in ability to read back notes.

Fours hours a week. Commerce Building. Fee, $20.

Elementary Stenography. (Pitman System.)

For beginners and those who desire a thorough review of the principles of the theory.

Three hours a week. Main and Commerce Buildings. Fee, $12.50.

Dictation (I).

For those who have completed the study of the theory. This is a beginners' dictation class.

Three hours a week. Main and Commerce Buildings. Fee, $12.50.

Advanced Dictation (II).

Brief reviews of the principles of the system that make for speed in note-taking. Dictation will begin at 70 words a minute, and will aim at attaining a rate of 100 words a minute.

Three hours a week. Main and Commerce Buildings. Fee, $12.50.

Speed Dictation (III).

The dictation in this class will begin at 100 words a minute and will aim at attaining a rate of 130 words a minute.

Three hours a week. Main and Commerce Buildings. Fee, $12.50.

High Speed and Reporting—Public and Court.

This course presumes on the part of the student a thorough grounding in shorthand principles and the ability to write at least 125 words a minute. It aims to prepare for Court Reporting, for the C.S.R. degree examination, for the reporting of conventions, hearings, sermons, interviews, after-dinner speeches and general free-lance stenographic work.

Three hours a week. Commerce Building. Fee, $15.

Intensive Course in Typewriting.

The touch method will be taught. A thorough knowledge of the keyboard will be gained and a minimum speed of 30 to 40 words a minute should be attained.

Four hours a week. Commerce Building. Fee, $20.

Elementary Typewriting.

For beginners. The touch system will be taught. This course aims at giving a complete mastery of the keyboard; a knowledge of the chief parts of the machine; care of the typewriter. A minimum rate of 25 words a minute should be attained.

Three hours a week. Commerce Building. Fee, $12.50.

Advanced Typewriting.

It is aimed to give speed drills so as to attain a speed of 50 or more words a minute.

Three hours a week. Commerce Building. Fee, $12.50.

STENOGRAPHY IN FOREIGN LANGUAGES

(Those desiring to prepare for secretarial positions in French or in Spanish, who have not a knowledge of English stenography, are advised to study English stenography.)

French Stenography. *Miss Maloubier.*

An intensive course for students who have a knowledge of French and also understand the principles of Pitman Stenography.

Three evenings a week. Commerce Building. Fee, $20.

Spanish Stenography.

Section A (Gregg). *Mrs. Hindle.*
Section B (Pitman). *Mrs. Garza.*

These intensive courses require a knowledge of the language and the principles of stenography.

Three evenings a week. Commerce Building. Fee, $20.

COURSES FOR DISABLED SOLDIERS

CONDUCTED IN COOPERATION WITH THE REHABILITATION DIVISION OF THE FEDERAL BOARD FOR VOCATIONAL TRAINING

By arrangement with the Federal Board for Vocational Training, the College conducts practical courses in automobile mechanics, general mechanics, drafting, electrical work, building construction, photography, fur and leather working. These courses carry with them no college credit, but they are designed to fit disabled soldiers for positions in industries.

The courses are given by the following members of the teaching staff:

Dean Robinson, Director.

Mr. Baum, Supervisor of Courses; Professors Skene and Autenrieth, and Messrs. Louis Goodman, S. A. Schwarz, MacCleave, Spitzenberg, Fecher, Atticks, Arland, Thomas, J. H. Estabrooke, Russoff, Wolchonok, Henry, London, Brenner, R. P. Smith, Yaconetti, and Lilienbloom.

VOCATIONAL AND TECHNICAL COURSES IN TECHNICAL SUBJECTS

BUILDING CONSTRUCTION

These courses are given by the staff of the Engineering Department of the College and experts from the field of building construction.

Professor McLoughlin in charge.

Buildings 1—Materials of Building Construction.

In this course the student studies the characteristics, tests and inspection of all materials used in building construction. Each material is studied from the time of manufacture to the purchase, inspection and placement in the building.

Sixteen weeks; two evenings a week. Main Building. Fee, $20.

Buildings 2—Special Topics in Building Construction.

This is a course of sixteen lectures designed for architects, architects' assistants, builders, inspectors and foremen. Each lecture is delivered by an expert in the particular subject treated. The lecture usually takes two hours. After each lecture one hour is set aside for discussion and the asking of questions by the students.

The list of lecturers includes Mr. Rudolph P. Miller, Superintendent of Buildings, Borough of Manhattan, Mr. Lazarus White, Mr. Nathan C. Johnson, Mr. George E. Strehan, Mr. Joseph Ross, Mr. Rollin C. Bastress, Chief Inspector of the New York City Bureau of Buildings, Mr. W. W. Lighthip, Mr. John V. Van Pelt, A. D. G. F., Mr. Frank G. McCann, M. E., Mr. James J. Sheridan, and Mr. W. F. Little.

Sixteen weeks; one evening a week. Main Building. Fee, $15.

Buildings 3—Computation and Design Work.

This course is made up of four divisions. A student may select the division of work which he is best fitted to take or which interests him most.

These four divisions are:

(A) Mechanics and Materials.
(B) Steel Design and Computation Work.
(C) Installation of Plumbing, Heating and Ventilation, Elevator and Wiring Systems.
(D) Fireproof and Re-enforced Concrete Construction.

Sixteen weeks; two evenings a week. Main Building. Fee, $20.

AUTOMOBILE MECHANICS

Automobile Course.

Professors Skene and Autenrieth and Assistants.

A practical and informational course on the construction, repair and operation of the gasoline automobile. Especially de-

signed for owners, prospective owners, salesmen, garagemen, chauffeur-mechanics, and all others who desire to obtain a thorough knowledge of the automobile. Includes lectures, laboratory instruction and outdoor driving lessons.

Sixteen weeks, 88 hours. Main Building. Fee (including driving lessons), $50.

Advanced Automobile Course. Starting, Lighting and Ignition Systems.

Professors Skene and Autenrieth and Assistants.

Lectures and laboratory practice on automobile electrical systems, including generators, motors, storage batteries, cut-outs and regulators, battery ignition, magneto ignition, lights and accessories; details of standard systems; and training in locating and remedying troubles.

Sixteen weeks, 80 hours. Main Building. Fee, $35.

LIBERAL AND GENERAL COURSES

Currents in Contemporary Literature. (British and American).

Professor Stair and Others.

This course studies a number of the more noteworthy aspects of contemporary British and American literature. Writers are taken up in their relations with groups and tendencies, not biographically or independently. Some of the topics for investigation are the new psychology in literature, the contemporary novel, tendencies in the drama, the new poetry, the Irish movement, modern prose style. The work includes lectures, collateral reading, reports and discussions.

Two hours a week. Main Building. Fee, $5.

Modern European Literature. (Continental.) *Dr. Friedland.*

The course takes up the chief figures in contemporary European literature and includes a discussion of the currents of contemporary thought in the chief countries of Europe. During the first semester the lectures are on Russian and Scandinavian literature. The foremost contemporary writers of France, England, Italy and Spain are taken up for study in the second semester. Readings are assigned, discussions held, and oral and written book-reviews required.

Two terms, two hours a week. Main Building. Fee, $10 each term.

Great Literary Classics. *Dr. Friedland.*

A reading and discussion course for the study of the great classics of literature in all forms. Using an outstanding masterpiece of literature as a basis, the characteristic features of the age, the people, and the nation that produced the masterpiece are viewed. Careful reading of the literary works under discussion is required.

Two terms, two hours a week. Main Building. Fee, $10 each term.

Mechanics of Composition. *Professor Stair.*

A special intensive course of practical work in grammar, vocabulary, spelling, punctuation, sentence structure, paragraph writing, and letter writing. It is intended for persons otherwise qualified to pursue college studies who are handicapped by weakness in English composition, especially for those of foreign birth, those who have not gone through high school, and those who have been long out of school. In connection with the course there is opportunity for personal conferences with the instructor outside the class period.

Two hours a week. Main Building. Fee, $7.50.

The Short Story. *Dr. Gaston.*

A study of the principles and structure of the short story, including motive, characterizing, unity, plot, setting, dialogue, diction, emotional element and realism. Each evening there will be read and analyzed at least one of the best short stories by current magazine writers. Stories by O. Henry, Kipling, Poe, Hawthorne, Stockton, Stevenson and other masters will also be read. Each student will be expected to write a fortnightly story.

The aim will be two-fold:

1. To produce stories that will sell. Each student will be expected to submit at least one story to one of a carefully selected list of publications printing short stories.

2. To add an element of enjoyment to life through the use of leisure time in the pleasurable work of the imagination. Textbook: Albright's *The Short Story.*

Two hours a week. Brooklyn Branch. Fee, $5.

Contemporary Russia (Social and Economic).
Mr. Yarmolinsky.

A survey of the economic, social, and political development of Russia for the last twenty-five years. A study of the historical background of the present revolution.

Two hours a week. Commerce Building. Fee, $5.

Mental and Educational Measurements.
Professor Heckman and Mr. E. M. Turner.

This course is planned to give a comprehensive study:

(a) of the nature and the application of the various intelligence scales and performance tests used in measuring the mental development and mental abilities of individuals, such as the Binet-Simon Intelligence Scale, the Stanford Revision Scale, the Yerkes Point Scale, the Pintner-Paterson Scale of Performance Tests, Otis Group Intelligence Scale, Army Tests;

(b) of the development of educational measurements and of the more important tests and scales used in measuring the results of school work, such as the Ayres Spelling Scale, Thorndike Reading Scale, Courtis Arithmetic Scale, Thorndike Handwriting Scale;

(c) of the technique of giving intelligence tests and conducting educational measurements;

(d) of the elements of statistics applicable in computing results of tests and measurements.

Two hours a week. Townsend Harris Hall. Fee, $5.

The Psychology of Social Relations and Group Actions.

Professor J. P. Turner.

A study of the psychological basis of social relations, the mental qualities of the *asocial* individual and the mind of the mob. Consideration is given to group behavior generally and to related problems such as the relation of climate to social characteristics. The principal conceptions of social psychology (invention, imitation, progress, etc.), will be examined and discussed in class and in reports.

Three hours a week. Main Building. Fee, $7.50.

Elementary French.

In connection with the general administration of the Evening Session and groups of Special Courses, the *Alliance Française de New York* offers three courses, one for beginners, a second year course and a third year course. The courses are designed to teach the student to understand and speak easy French and later impart some knowledge of French manners, customs and literature. Practical conversational methods will be used throughout, yet the work will be systematized and guided by regular textbook assignments and study. The three courses are so arranged that a student who contemplates further academic study of French as provided by advanced college courses will be able, if he completes these three, to enter college with credit for three years of French.

Course a. Three hours a week. Fee, $3.
Course b. Three hours a week. Fee, $5.
Course c. Three hours a week. Fee, $5.
Main and Commerce Buildings and Brooklyn Branch.

BROOKLYN BRANCH

of the Evening Session

OFFICERS OF ADMINISTRATION AND INSTRUCTION

SIDNEY E. MEZES, LL.D., *President of the College*
FREDERICK B. ROBINSON, Ph.D., *Director of the Evening Session*
PAUL H. LINEHAN, Ph.D., *Assistant Director of the Evening Session*
ADELBERT GRANT FRADENBURGH, Ph.D., *Assistant to the Director, in charge of the Brooklyn Branch*

EDUCATION AND ENGLISH

HARRY C. KROWL, Ph.D., *Associate Professor of English*
JAMES WILLIAMS PARK, A.M., *Professor—(Adelphi College)*
CHARLES ROBERT GASTON, Ph.D., *Instructor in English*
J. MORTIMER CLARK, A.M., *Instructor in English*
ROWENA KEITH KEYES, A.M., *Instructor in English*

HISTORY AND ECONOMICS

ADELBERT GRANT FRADENBURGH, Ph.D., *Professor—(Adelphi College)*
ARTHUR LAZARUS, M.A., LL.B., C.P.A., *Tutor in Accountancy*
ALTON J. BERNSTEIN, B.S., *Tutor in Accountancy*
LOUIS PRASHKER, A.B., J.D., *Tutor in Business Law*

JOURNALISM

HERBERT L. BRIDGMAN, M.A., *Adviser*
H. V. KALTENBORN, A.B., *Lecturer*
HENRY W. SUYDAM, *Instructor*

LATIN

WILLIAM W. MOONEY, Ph.D., *Professor—(Adelphi College)*

MATHEMATICS

JOSEPH BOWDEN, Ph.D., *Professor—(Adelphi College)*
L. LELAND LOCKE, A.M., *Instructor*

PHILOSOPHY

ERNEST N. HENDERSON, Ph.D., *Professor—(Adelphi College)*

PUBLIC SPEAKING

JACOB CLOYD TRESSLER, A.M., *Instructor*

ROMANCE LANGUAGES

ANDRÉ CAMILLE FONTAINE, A.M., *Instructor in French*
JOSEPH L. PERRIER, Ph.D., *Instructor in Spanish*
MARIUS CARPENTIER, M.A., *Instructor in French*

J. RIDLEY PARKER, *Librarian*
HENRY T. ALDEN, *Recorder*

COURSES IN THE SEVERAL DEPARTMENTS

Offered in 1920-1921

ECONOMICS

1. Elements of Economics. *Professor Fradenburgh.*
2. Evolution of Industry. *Professor Fradenburgh.*

130-131. Accounting, I—Theory, Practice and Problems. *Mr. Lazarus and Mr. Bernstein.*

190. Business Law 1. *Mr. Prashker.*
191. Business Law 2. *Mr. Prashker.*

EDUCATION

11. The History of Culture and Education. *Professor Park.*
31. Philosophy and Principles of Education. *Professor Park.*
121. Educational Psychology. *Professor Henderson.*

ENGLISH LANGUAGE AND LITERATURE

1-2. Rhetoric *Dr. Gaston.*
3. The History of English Literature. *Mr. Clark and Professor Park.*

22-23. Shakespeare. *Professor Krowl.*
26. English Prose to the End of the XVIIIth Century. *Professor Krowl.*
27. English and American Prose of the XIXth Century. *Professor Krowl.*

GOVERNMENT AND SOCIOLOGY

1. American Government and Citizenship. *Professor Park.*
5. Elements of Sociology. *Professor Park.*

HISTORY

1. Mediaeval and Modern History to 1648. *Professor Fradenburgh.*
2. European History, 1648-1870. *Professor Fradenburgh.*
3. Contemporary European History. *Professor Fradenburgh.*
4. The United States since 1876.
27. The World War. *Professor Fradenburgh.*
31. American Colonial and Revolutionary History.

LATIN

1-2. Vergil. *Professor Mooney.*
3. An Essay of Cicero and Selected Satires of Horace.
4. Horace: Odes and Epistles.
4*b*. Supplementary Course.

MATHEMATICS

1. Solid Geometry.
2. Trigonometry.
3. Advanced Algebra.
4*n*. Analytic Geometry and Calculus.
4-5*n*. Calculus.

PHILOSOPHY

1. Ethics. *Professor Henderson.*
2. History of Philosophy: Ancient and Mediaeval. *Professor Henderson.*
3. History of Philosophy: Modern. *Professor Henderson.*
12. Logic and Scientific Method. *Professor Henderson.*
5. General Psychology. *Professor Henderson.*

PUBLIC SPEAKING

1. Vocal Expression. *Mr. Tressler.*
2. Visible Expression.
3. Prose Declamation.
4. Poetry Declamation.
5-6. Debate.
7-8. Extemporaneous Speaking.

ROMANCE LANGUAGES

FRENCH

1. Reading in Nineteenth Century Literature. *Mr. Fontaine.*
2. Reading in Modern French.
3. The Seventeenth Century. *Mr. Fontaine.*
4. The Seventeenth Century—(Continued).
41. Elementary French (First Term). *Mr. Fontaine.*
42. Elementary French (Second Term). *Mr. Carpentier.*
43-44. Intermediate French. *Mr. Carpentier.*

SPANISH

41-42. Elementary Spanish. *Dr. Perrier.*
43-44. Intermediate Spanish. *Dr. Perrier.*

SPECIAL COURSES

Journalism. *Mr. Kaltenborn.*
Civics for Women. *Professor Fradenburgh.*
The Short Story. *Dr. Gaston.*

DIVISION OF EXTENSION COURSES

FOR

TEACHERS—LIBRARIANS—SOCIAL WORKERS

For more detailed information consult special bulletin.

In order to assist the teachers of the city to promote their cultural attainments and to qualify for higher licenses, the Department of Education of the College organized in September, 1908, a complete system of Extension Courses. The courses are approved by the Board of Examiners of the City Department of Education and are granted full credit toward partial fulfilment of the requirements for higher licenses. Sessions are held daily after school hours, at 4.15 p. m., and on Saturdays.

These courses are distributed among the following centers:

MANHATTAN

The College Buildings
Commerce Building of the College
New York Public Library
Washington Irving High School
Manhattan Trade School.
Public School No. 17
Public School No. 27
Public School No. 41
Public School No. 62
Public School No 93
Public School No. 186

BRONX

Evander Childs High School
Public School No. 4
Public School No. 37
Public School No. 44

BROOKLYN

Training School for Teachers
Girls' High School
Erasmus Hall High School
Brooklyn Vocational School
Public School No. 15
Public School No. 26
Public School No. 47
Public School No. 93

QUEENS

Bryant High School
Jamaica Training School for Teachers
Public School No. 89

RICHMOND

St. George Public Library

The Extension Courses of the College are given in active co-operation with the Bureau of Lectures of the Department of Education, the Brooklyn Teachers' Association, the Federation of Teachers' Associations, the Teachers' Interest Organization, the New York Public Library, the *Alliance Française,* the Educational Committee of the Italy-America Society, the Interdepartmental Hygiene Board of the United States, and the New York State Department of Education.

Officers of Instruction

Sidney Edward Mezes, LL.D., *President*
Paul Klapper Ph.D., *Director and Associate Professor of Education*

Lewis F. Mott, Ph.D., *Professor of English*
Charles A. Downer, Ph.D., *Professor of Romance Languages*
Erastus Palmer, M.A., *Professor of Public Speaking*
Samuel A. Baldwin, F.A.G.O., *Professor of Music*
Leigh Harrison Hunt, M.S., M.D., *Professor of Art*
Camillo von Klenze, Ph.D.,
Professor of the German Language and Literature
Frederick B. Robinson, Ph.D., *Professor of Economics*
Harry C. Krowl, Ph.D., *Associate Professor of English*
William B. Guthrie, Ph.D., *Associate Professor of Political Science*
Charles F. Horne, Ph.D., *Associate Professor of English*
Nelson P. Mead, Ph.D., *Associate Professor of History*
J. Salwyn Schapiro, Ph.D., *Associate Professor of History*
Ventura Fuentes, A.B., M.D., *Associate Professor of Spanish*
Alexis I. du Pont Coleman, M.A., *Associate Professor of English*
Samuel B. Heckman, Ph.D.,
Associate Professor of Education and Director of the Educational Clinic
Gaston A. Laffargue, B-ès-L., *Assistant Professor of French*
Felix Weill, B-ès-L., L-ès-L., *Assistant Professor of French*
Francesco Ettari, Professore di Letteratura Italiana, Ph.D.,
Instructor in Romance Languages
A. Arbib-Costa, *Instructor in Romance Languages*
A. G. Schulman, A.B., *Instructor in Art*
Louis Sigmund Friedland, Ph.D., *Instructor in English*

(Supervisors and Instructors not from the College of the City of New York)

Ernest L. Crandall,
Supervisor of Lectures and Visual Instruction, Board of Education
A. K. Aldinger, M.D.,
Supervisor of Physical Training, New York City Schools
James H. Allen, Pd.M., M.A.,
Acting Principal, Brooklyn Vocational School
Walter A. Bruce,
Teacher in Stenography and Typewriting, Evander Childs High School
I. David Cohen, A.B., LL.B., Pd.M., *Principal, Tottenville Evening Trade School; Acting Principal, Brooklyn Continuation School*
Christine Dobbins, *Inspector, Athletics and Folk Dancing for Girls*
John Domerhuizen,
Instructor, Electric Wiring and Motion Picture Operation
Thomas M. Donohue, Pd.M., *Principal, P. S. No. 93, Queens*
Joseph J. Eaton, B.S., *Director of Industrial Arts, Yonkers Public Schools*
Ida E. Fischer, B.A., *Teacher of Music, Morris High School*
William Flanagan, B.A., *Principal, Curtis Evening High School*
S. Wordsworth Fox, B.A., *First Assistant, Washington Irving High School*
Charles L. Frank, B.S., L.L.B., *Chairman, Department of Stenography and Typewriting, Morris High School*
I. H. Goldberger, M.D.,
Assistant Director of Educational Hygiene, Department of Education
Eric Green, M.D., *Instructing Physician, American Red Cross*

Jacob Greenberg, M.A.,
First Assistant in French, New York City High Schools
Max B. Greenstein, M.A.,
Assistant Teacher, Washington Irving High School
William A. Hannig, Ph.D., *Principal, P. S. No. 43, Bronx*
James Harrigan, A.B., *Principal, S. I. Continuation School*
Horace G. Healey, A.M.,
Chairman, Department of Stenography, Evander Childs High School
Henry E. Hein, Ph.D., *Principal, P. S. No. 40, Bronx;*
Acting Principal, E. S. Evening High School for Men
J. Blake Hillyer, M.A.,
Teacher of Physical Training, New York City High Schools
Simon Hirsdansky, M.A., *Principal, Public School No. 4, Bronx*
Franklin Keller, Ph.D., *Principal, E. S. Continuation School*
John F. Kelly, B.S.,
Teacher in Stenography and Typewriting, Evander Childs High School
Frieda Kohn, B.A., *Teacher of Art Weaving, Prevocational School No. 62*
David Kriegel, M.E., *Principal Brooklyn Navy Yard Continuation School*
Charles W. Laffin, M.A., *Acting Principal, West Side Continuation School*
Clyde C. Lister,
Instructor in Penmanship, Maxwell Training School for Teachers
Mark I. Markett, A.B., *Teacher of Stenography, High School of Commerce*
Louis Marks, M.S., M.A., *Principal, P. S. No. 64, Manhattan*
Frederick Martin, Ph.D.,
Director of Speech Improvement, New York City Schools
Walt H. Mechler, Ph.B.,
Teacher of Stenography, High School of Commerce
Emily A. O'Keefe, *Inspector of Athletics, New York City Schools*
Luella A. Palmer, M.A.,
Assistant Director of Kindergartens, New York City Schools
Nathan Peyser, Ph.D., *Principal, P. S. No. 158, Brooklyn*
William E. Reed, M.A.,
Instructor in Civics, Manual Training High School
James J. Reynolds, M.A., *District Superintendent of Schools*
Frank A. Rexford, Pd.B., *Assisting in Supervision of Civics*
Conrad J. Saphier, M.C.S., *First Assistant, New York City High Schools*
Oswald Schlockow, Ph.D., *Principal, P. S. No. 50, Brooklyn*
Morris E. Siegel, M.A., *Director, Evening and Continuation Schools*
H. B. Smith, M.A.,
Regional Director, Federal Board of Vocational Education
Frances So Relle, *Instructor in Gregg Shorthand*
Isidore Springer, Ph.D., *Principal, P. S. No. 25, Brooklyn*
Florence W. Slater, B.S., *Instructor, Washington Irving High School*
Edward Walmsley Stitt, M.Sc., Pd.D., *District Superintendent of Schools*
Bertha R. Stone, *Teacher of Stenography, Washington Irving High School*
Arthur M. Sugarman, B.A.,
Instructor in Stenography, Julia Richman High School
Samuel Tannenbaum, B.S., *Instructor in Shopwork*
Joseph S. Taylor, Ph.D., *District Superintendent of Schools*
Martha S. Tourte, *Special Teacher of Music, New York City Schools*
Rufus A. Vance, M.A., *Principal, P. S. No. 148, Brooklyn*
Joseph K. Van Denburg, Ph.D.,
Principal, Speyer Experimental Junior High School
Benjamin Veit, B.S., LL.B., *District Superintendent of Schools*
Samuel Viertel, M.A., *Principal, P. S. No. 10, Bronx*
John E. Wade, B.S., A.M., *District Superintendent of Schools*
Joseph H. Wade, Ph.D., *District Superintendent of Schools*
Elizabeth A. Walsh, B.S., M.A., *Assistant Inspector of Ungraded Classes*
John V. Walsh, A.B., *Instructor in Shorthand, Morris High School*

Courses Offered in 1920-1921

EDUCATION

A. GENERAL COURSES IN EDUCATION

History of Education. *Dr. Hannig.*
See Education 11.
Counts 2 credits toward a degree.

Principles of Education. *Professor Klapper.*
See Education 31.
Counts 2 credits toward a degree.

Educational Psychology. *Professor Heckman.*
See Education 121.
Counts 2 credits toward a degree.

Social Forces in Education. *Dr. Peyser.*
This course is designed to give teachers, supervisors, attendance officers, and welfare workers, a knowledge of those social forces which produce the vital problems in city education.
Counts 2 credits toward a degree.

B. GENERAL METHOD

Methods of Teaching. *Professor Klapper.*
See Education 151.
Counts 1½ credits toward a degree.

Problems of Classroom Management and Methods.
Superintendents Reynolds, Wade, Stitt and Veit.
Counts 1½ credits toward a degree.

Teaching the Major Subjects in the Upper Four Years.
Mr. Viertel.
An analysis of the courses of study for the last four years in English and its branches, Arithmetic, History and Geography will introduce this course.
Counts 1½ credits toward a degree.

Teaching the Major Subjects in 5th and 6th Years.
Mr. Donohue.
Counts 1½ credits toward a degree.

C. METHODS OF TEACHING SPECIAL SUBJECTS

Arithmetic for Teachers of Elementary Schools.
Dr. Springer and Mr. Hirsdansky.
Counts 1½ credits toward a degree.

English in the Elementary School. *Dr. Taylor.*
Counts 1½ credits toward a degree.

English in the 6th, 7th, 8th Years. *Mr. Vance.*
Counts 1½ credits toward a degree.

Composition in the Elementary Schools (with Correlated Subjects). *Dr. Hein.*
The aim of this course is to improve the teaching of composition and the related subjects commonly grouped under English by giving the teacher greater mastery of the content and a better understanding of the principles underlying sound pedagogical practices.
Counts 1½ credits toward a degree.

The Teaching of Muscular Movement Penmanship. *Mr. Lister.*

The aim will be to present a practical course in the pedagogy and practice of muscular movement penmanship.

Method and Content in Geography and General Science. *Mr. Marks.*

Counts 3 credits toward a degree.

Nature Study; Its Content and Method. *Miss Slater.*

Fundamental Facts in Social and Political Science as Related to the Teaching of History, Civics and Current Events in Elementary Schools. *Dr. Schlockow.*

Counts 1½ credits toward a degree.

D. COURSES IN MUSIC AND DRAWING

Music in the Public Schools. *Miss Tourte and Miss Fischer.*

Counts 2 credits toward a degree.

Ear and Eye Training in Music. *Miss Fischer.*

This course will aim to give the student the power to think tones and to sense rhythms, and to recognize and write simple melodic phrases in all keys.

Counts 1 credit toward a degree.

Drawing and Design, Method and Content. *Mr. Schulman.*

Counts 2 credits toward a degree.

E. COURSES IN PHYSICAL TRAINING AND HYGIENE

Under the Supervision of Dr. A. K. Aldinger.

The School Health Officer. *Dr. Goldberger.*

Elementary Physical Training. *Dr. Aldinger.*

Advanced Physical Training. *Dr. Aldinger.*

Folk Dancing and Athletics for Girls. *Miss O'Keefe and Miss Dobbins.*

Social Hygiene and Sex Education. *Mr. Hillyer.*

F. EDUCATION OF UNGRADED CHILDREN

Psychology and Education of Exceptional Children. *Professor Heckman.*

Counts 2 credits toward a degree.

Methods of Teaching Ungraded Classes. *Miss Walsh.*

Counts 2 credits toward a degree.

G. KINDERGARTEN WORK

Project Method in the Kindergarten. *Miss Palmer.*

The aim of this course is to consider the normal development of children between four and six years of age and to outline a method for the kindergarten in accord with new movements in education.

Counts 1½ credits toward a degree.

H. COURSES IN SPEECH IMPROVEMENT

Clinics for Speech Correction. *Dr. Martin and Section Supervisors.*

These clinics give a practical training to those desiring to become specialists in the correction of speech defects.

The Correction of Speech Defects. *Dr. Martin.*

This course includes an intimate study of the anatomy, physiology and development of the vocal organs, the psychology of speech and the pedagogical principles and methods in the analysis, classification and correction of cases of defective speech.

Clinic and Theory Courses count 2 credits toward a degree.

Advanced Course in Correction of Speech Defects. *Dr. Martin.*

This course is devoted to an intensive study of the psychology of speech and the mental and physical therapeutics of speech development.

J. HANDWORK FOR REGULAR, UNGRADED AND PRE-VOCATIONAL CLASSES

Handwork for Teachers of Ungraded Classes. *Mr. Tannenbaum.*

A practical course in numerous types of handwork suitable for beginners and advanced teachers of abnormal children.

Theory and Practice of Art Weaving. *Miss Kohn.*

This course is designed to develop skill in the art of weaving and to supply teachers with exercises suitable for ungraded, normal, pre-vocational and vocational classes.

K. COURSES IN SCHOOL MANAGEMENT

Administration of New York City Schools. *Mr. Wade.*

Counts 2 credits toward a degree.

L. SECONDARY SCHOOLS: ORGANIZATION AND TEACHING

Problems of Administration and Teaching in the Junior High School. *Dr. Van Denburg.*

Counts 2 credits toward a degree.

Problems of Secondary Teaching. *Dr. Bradley.*

Counts 2 credits toward a degree.

Teaching Romance Languages. *Prof. Downer and Mr. Greenberg.*

Counts 2 credits toward a degree.

Method and Content in Municipal Government or Community Civics. *Mr. Reed.*

This course makes a study of actual governmental function. It is planned to give especial aid to teachers of community civics and to those who are preparing themselves to teach the subject.

Counts 3 credits toward a degree.

M. COURSES FOR TEACHERS OF VOCATIONAL SUBJECTS

Methods and Principles of Vocational Education. *Mr. Eaton.*

Counts 2 credits toward a degree.

Administration and Supervision of Vocational Schools. *Mr. Eaton.*

Counts 2 credits toward a degree.

Criticism of Trade Teaching. *Mr. Allen.*

A practical course in the application of the principles of teaching to the teaching of shop subjects.

Trade Analysis. *Mr. H. B. Smith.*

The purpose of this course is to help the man with trade experience to organize a proper curriculum, an effective line of instruction.

Training Course for Teachers in Continuation, Part-Time Schools. *Mr. Laffin, in Charge.*

Instructors—Messrs. Morris E. Siegel, C. W. Laffin, H. B. Smith, I. D. Cohen, F. Keller, James Harrigan, Wm. Flanagan, David Kriegel, and Miss Edna Farnsworth.

This course is designed to prepare teachers who will be required during the next five years in the part-time schools of New York City and State. The course concerns itself with the teaching problems peculiar to part-time schools.

Vocational Guidance, Placement and Follow-Up. *Mr. Cohen.*

N. COMMERCIAL SUBJECTS

Pitman Stenography

Arthur M. Sugarman, Supervisor, Stenography and Typewriting.
Charles L. Frank, Supervisor of Courses at Washington Irving High School.

Elementary Course. *Messrs. Frank, Saphier and Walsh.*
Intermediate Course. *Messrs. Saphier and Walsh.*
Advanced Course. *Messrs. Frank and Saphier.*
Methods of Teaching Pitman Stenography. *Messrs. Sugarman and Saphier.*

Gregg Stenography

Elementary Gregg Stenography. *Mrs. So Relle.*
Intermediate Gregg Stenography. *Mr. Markett.*
Advanced Gregg Stenography. *Mr. Mechler.*
Methods of Teaching Gregg Stenography. *Mr. Markett*

Typewriting and Office Practice

Typewriting I, Elementary (Touch Method). *Messrs. Saphier and Walsh.*
Typewriting, Intermediate and Advanced. *Messrs. Saphier, Walsh and Kelly.*
Methods of Teaching Typewriting. *Messrs. Frank and Saphier.*
Methods of Teaching Office Practice. *Mr. Frank.*

Bookkeeping and Accountancy

Elementary and Intermediate Bookkeeping. *Mr. Greenstein.*
Advanced Bookkeeping and Preparatory Accounting. *Mr. Greenstein.*
Elements of Accounting. *Mr. Greenstein.*
Methods of Teaching Commercial Subjects. *Mr. Fox.*

Counts 2 credits toward a degree.

ENGLISH

Some English Poets. *Professor Mott.*

This course makes a critical study of poems by Wordsworth, Coleridge, Byron, Shelley, Keats and Rossetti and gives practice in writing essays based on such study.

Counts 2 credits toward a degree.

The Novel. *Professor Horne.*

Counts 2 credits toward a degree.

Appreciation of Poetry. *Professor Coleman.*

Counts 2 credits toward a degree.

Contemporary Literature. *Professor Krowl.*

Counts 2 credits toward a degree.

The Short Story: Its Development and Appreciation. *Professor Coleman.*

Counts 2 credits toward a degree.

FOREIGN LITERATURES AND LANGUAGES

Comparative Literature of Modern North Europe. *Professor von Klenze.*

This course presents a study of the main currents of modern literary life in the Scandinavian countries, Russia, and Germany, preceded by lectures on the aims of the comparative study of literature.

Counts 2 credits toward a degree.

History of French Literature in the Eighteenth Century. *Professor Weill.*

This course is given in co-operation with the Alliance Française of New York. It is the fourth part of a course on French Literature, open not only to teachers, but to all persons interested in French Literature and able to follow lectures *given entirely in French.*

Counts 2 credits toward a degree.

French Courses I, II, III, IV. *Professors Downer and Laffargue.*

Four graded courses in French. Emphasis is on spoken rather than written French. Course I is of elementary grade; Course IV is equivalent to the fourth term of College French.

Courses I and II count 4½ credits toward a degree. Courses III and IV have the same credit.

Spanish Conversation and Composition (I, II and III). *Professor Fuentes.*

Three graded courses in Spanish. Course I is for beginners. Course III is equivalent to the third term of College Spanish.

Counts 6 credits toward a degree.

Conversational Italian (I, II, III). *Mr. Costa and Dr. Ettari.*

Three graded courses in Italian. Course I is for beginners; Course III is equivalent to the third term of College Italian.

Counts 6 credits toward a degree.

POLITICAL SCIENCE

ECONOMICS, SOCIOLOGY AND GOVERNMENT

Economics. *Professor Robinson.*

Counts 2 credits toward a degree.

American Government and Politics. *Professor Guthrie.*

To understand the American Government, it is necessary to understand two distinct sets of governing forces or factors—the legal, judicial or constitutional forces, and the non-legal or political forces. It is the aim of this course to examine, explain and discuss both of these forces.

Counts 2 credits toward a degree.

Municipal Government. *Mr. Rexford, Supervisor.*

This course will study the structure and function of city government and will indicate the basic principles of community organization, the understanding of which is prerequisite for intelligent citizenship. Prominent officials of the City of New York will be invited to speak to the class. This course is planned to be of service in the teaching of civics, citizenship, ethics and community relations.

Counts 3 credits toward a degree.

The Social and Cultural Background of the Peoples of Greater New York. *Dr. Friedland.*

Purposes: Social workers, teachers, librarians, and those whose work is largely with unassimilated foreigners, can do effective work only when they have acquainted themselves with the traditions, habits, customs, and psychology of these peoples. The teacher, the librarian, the social-service worker must master the technique of approach to these human beings.

Conduct of the Course: Lectures will be delivered by the supervisor of the course and by representative authorities: scholars, writers, editors, professional men and women chosen from each native group.

HISTORY

Review of American History and Government, with European Background. *Professor Mead.*

The World War and Reconstruction. *Professor Mead.*

This course considers the background of the World War in its political, economic and diplomatic aspects; the progress of the war; the entrance of the United States; the organization of the Peace Conference and the controversy over the ratification in the United States Senate. The course concludes with a study of the problems of reconstruction in Europe and America.

Counts 2 credits toward a degree.

Comparative History of Modern Europe. *Professor Schapiro.*

Counts 2 credits toward a degree.

Development of Modern Italy. *Mr. A. Arbib-Costa.*

(Under the auspices of the Italy-America Society.)

This is the first of a series of courses that aim to set forth in systematic form the development of the civilization of each of the great culture nations of the world.

ART

Appreciation of Modern Art. *Professor Hunt.*

(This course is free to the public; but when taken as an Extension Course by teachers, social workers or librarians the regulations governing Extension Courses must be met.)

The subjects in this course of Appreciation of Modern Art embrace the entire realm of art from its beginning in Florence to the multitudinous schools and "isms" of the twentieth century.

Counts 2 credits toward a degree.

MUSIC

History and Appreciation of Music. *Professor Baldwin.*

This course includes a comprehensive study of the growth of music as an art, the great composers and their works, and the analysis of musical forms. The whole subject will be considered from the standpoint of those who listen to music.

Counts 2 credits toward a degree.

SPECIAL COURSES FOR LIBRARIANS

The Novel. *Professor Horne.*

English Poets. *Professor Mott.*

The Short Story: Development and Appreciation. *Professor Coleman.*

French, Four Courses in Graded Series. *Professors Downer and Laffargue.*

Spanish, Three Courses in Graded Series. *Professor Fuentes.*

Italian, Three Courses in Graded Series. *Mr. Costa and Dr. Ettari.*

Social and Cultural Background of the Peoples of Greater New York. *Dr. Friedland.*

Comparative History of Modern Europe. *Professor Schapiro.*

Appreciation of Music. *Professor Baldwin.*

Extemporaneous Speaking (First Course). *Professor Palmer.*

This course gives practice in thinking and speaking before small groups.

Counts 1 credit toward a degree.

ADDITIONAL COURSES

Motion Picture Operation. *Mr. Domerhuizen.*

This course, designed for teachers in schools developing visual aids in instruction, emphasizes theory and practice of motion picture operation.

Methods in Elementary Dancing. *Miss O'Keefe.*

This course will include instruction in elementary technique, exercises for muscle building and training and material suitable for high schools in classical and national dancing.

THE PREPARATORY HIGH SCHOOL

Townsend Harris Hall

Officers of Administration and Instruction

MARIO EMILIO COSENZA, Ph.D., *Director*
G. PAYN QUACKENBOS, Ph.D., *Assistant Director*

ART

[1]JOSEPH CUMMINGS CHASE,	*Supervisor*
FREDERICK W. HUTCHISON,	*Acting Supervisor*
HENRY W. PECKWELL,	*Instructor*
ROBERT BRUCE MACDOUGALL,	*Instructor*
LOUIS WEINBERG, A.B.,	*Instructor*
JOHN T. LANG,	*Instructor*
MARK FENDERSON,	*Assistant Instructor*
ALBERT PHILIP D'ANDREA, A.B.,	*Assistant Instructor*

ENGLISH

JOSEPH FRANCIS WICKHAM, A.M.,	*Supervisor*
DAVID KLEIN, Ph.D.,	*Instructor*
JARVIS KEILEY, A.M.,	*Instructor*
JOSEPH L. TYNAN, A.M.,	*Instructor*
JOSEPH EDWARD FITZPATRICK, A.M.,	*Instructor*
MICHAEL J. KELEHER, A.M.,	*Instructor*
ROBERT H. ALLES, A.M.,	*Instructor*
CECIL BALLARD DYER, A.B.,	*Assistant Instructor*
THEODORE GOODMAN, A.M.,	*Assistant Instructor*

HISTORY

LEON H. CANFIELD, Ph.D.,	*Supervisor*
[2]KURT E. RICHTER, B.S., Pd.D.,	*Instructor*
[3]CHARLES JASTROW MENDELSOHN, Ph.D.,	*Instructor*
SAMUEL CARLETON HAIGHT, B.S.,	*Instructor*
HOWARD C. GREEN, A.B.,	*Instructor*
HERMAN ARNOLD GRAY, A.M.,	*Assistant Instructor*
JACOB A. FRIEDMAN, A.M.,	*Tutor*

LATIN AND GREEK

G. PAYN QUACKENBOS, Ph.D.,	*Supervisor*
EMORY B. LEASE, Ph.D.,	*Instructor*
STANLEY SIMONDS, Ph.D.,	*Instructor*
BARCLAY W. BRADLEY, Ph.D.,	*Instructor*
GEORGE V. EDWARDS, Ph.D.,	*Instructor*
CHARLES JASTROW MENDELSOHN, Ph.D.,	*Instructor*
JOSEPH PEARL, Ph.D.,	*Instructor*
EDGAR HALLIDAY, A.M.,	*Instructor*

[1] Absent on leave.
[2] Instructor in German.
[3] Instructor in Greek.

MATHEMATICS

George M. Hayes, A.M.,	*Supervisor*
Alexis Eugene Senftner, Ph.D.,	*Instructor*
[1]Richard O. Heynich, Dipl.,	*Instructor*
Camille A. Toussaint, A.M.,	*Instructor*
Samuel A. Schwarz, A.M., C.E.,	*Instructor*
William Alexander Whyte, B.S.,	*Instructor*
Devereux Duer Robinson, M.E.,	*Instructor*
Charles C. Grove, Ph.D.,	*Instructor*
Bennington P. Gill, A.M.,	*Assistant Instructor*
Philip L. Smith, B.A.,	*Assistant Instructor*

PHYSICS

Reinhard A. Wetzel, B.S.,	*Supervisor*
Waldo Bromley Truesdell, A.M.,	*Instructor*
Simon Sonkin, B.S.,	*Tutor*
Georg Kayser,	*Laboratory Assistant*

ROMANCE LANGUAGES

Robert J. Damen,	*Supervisor*
[2]Hugh S. Lowther, Ph.D.,	*Instructor*
Francesco Ettari, Ph.D.,	*Instructor*
Pierre J. Marique, Ph.D.,	*Instructor*
Francis L. Rougier, Ph.D.,	*Instructor*
[3]Louis Sigmund Friedland, Ph.D.,	*Instructor*
Alfredo Elías, Lic. en Dro.,	*Instructor*
Jean des Garennes, A.M., LL.M.,	*Instructor*
William Troyansky, A.B.,	*Tutor*
Jacob L. Pasternak, A.B.,	*Tutor*
Elliot H. Polinger, A.B.,	*Tutor*
John Castro, Dipl.,	*Tutor*

Samuel Newman,	*Recorder*
William Ballantine Boyd, M.D.,	*Medical Examiner*
Louis F. Sanman, M.D.,	*Medical Examiner*
George G. Holz, D.D.S.,	*Dental Examiner*
Margaret B. James,	*Library Assistant*

[1] Instructor in German.
[2] Absent on leave.
[3] Instructor in English.

Courses of Study

Townsend Harris Hall offers to New York boys graduated from elementary schools a preparatory high school curriculum for those who wish to qualify for admission to college, and especially for admission to the freshman class of the College of the City of New York.

The sum of the work required for the completion of the preparatory course is fifteen college entrance units.

Emphasis is placed upon the quality of the work and the capacity of the student. The individual schedule is determined by the record of the student from term to term. This flexible program, administered under close supervision, gives every student opportunity to prepare most economically for his college studies.

The total requirements of the Townsend Harris Hall courses are as follows:

ARTS		SCIENCE	
Subject.	Units.	Subject.	Units.
English	3	English	3
Latin	3	French	3
Greek, French, Spanish or Italian	2	Greek, Italian, Latin or Spanish	2
Mathematics	3	Mathematics	3
Physics	1	Physics	1
History	1½	History	1½
Drawing	1	Drawing	1
Civics	½	Civics	½
Oral English		Oral English	

The applicant for admission to Townsend Harris Hall should decide as early as possible for which degree he wishes to be a candidate in his college course. If he wishes to become a Bachelor of Arts (A.B.), he should begin with Latin as his first foreign language; otherwise with either Latin or French.

For the first half-year all students take English, mathematics, drawing, Latin or French, each five hours a week, and civics, two hours a week. Thereafter the number of subjects assigned depends upon the student's capacity. Advancement throughout the course is by subject, so that the satisfactory completion of each half-year's work in a subject is necessary for its continuation. An added subject may be taken at the beginning of any half-year when the student's record for the preceding half-year indicates that he can satisfactorily pursue the additional subject. The schedule of recitations is purposely arranged to permit the student to benefit by his proficiency, so that, if competent, he may complete the course in three years. Satisfactory completion of the course entitles the student to admission to the freshman class of the College without entrance examinations.

ART

Prescribed four terms in both the Arts and Science Courses.

T 1-2. Elementary Freehand Drawing. *5 hours a week.*

The first term is devoted to freehand drawing from simple geometrical solids and other objects, single and in groups, with application of the elementary principles of perspective. Particular stress is laid on construction and proportion. Simple principles of decorative design are studied and applied.

In the second term more advanced groups of objects and casts of ornamental forms are drawn and their light and shade are studied. Exercises in drawing from memory are given. Decorative design is continued with application to familiar forms.

T 3-4. Advanced Freehand Drawing and Design, or Mechanical Drawing. *4 hours a week.*

In the first term freehand drawing is continued as well as decorative design, with use of color and application to practical

problems. Mechanical drawing is offered as an alternative; and if elected takes the place of freehand drawing and decorative design for both T 3 and T 4.

In the second term continuation of advanced decorative design with use of color and application to practical domestic and commercial purposes.

ENGLISH

Prescribed six terms in both the Arts and Science Courses.

T 1. *5 hours a week.*

Three hours of the five are devoted to grammar, composition and oral English. Hitchcock's *Enlarged Practice Book* is used as a textbook. Themes are written and revised in the classroom. English grammar is systematically reviewed. Attention is given to the mechanics of enunciation, and to the formation of proper habits of speech. *Ivanhoe, Treasure Island, A Midsummer Night's Dream*, and *The Ancient Mariner* are read in class; and several books from a selected list are read outside of the classroom.

T 2. *5 hours a week.*

The time is divided as in T 1, and the same textbook is used. In composition, attention is concentrated on sentence structure, with weekly theme-writing in the classroom. Drill in the mechanics of speech is continued, and oral expression is developed. The students read in class *Silas Marner, The Merchant of Venice,* Palmer's *Odyssey*, and a selection of American poetry. Supplementary reading is required as in the preceding term.

T 3. *4 hours a week.*

Two hours are devoted to rhetoric and two to literature. Part I. of Brooks and Hubbard's *Composition Rhetoric* is covered, with chief attention to the paragraph. Fortnightly themes are required; the study of grammar is continued; some time is devoted to synonyms; several extracts are memorized. Speech habits and oral expression receive especial attention. The study of literature includes *The Tale of Two Cities, The Deserted Village*, Gray's *Elegy*, Sheridan's *The Rivals*, and Helen Keller's *The Story of My Life*, as well as several volumes of supplementary reading.

T 4. *4 hours a week.*

The division of time is the same as in T 3. The principles of description, narration, exposition, and argumentation are presented on the basis of Part II. of Brooks and Hubbard's *Composition Rhetoric*, with weekly and fortnightly themes. Oral expression is emphasized. The students read four *Idylls of the*

King, Julius Caesar, Lincoln, *Selections from Letters and Speeches,* and selected standard short stories (about 250 pages). Extracts from these works are memorized. The work in supplementary reading is continued.

T 5-6. *4 hours a week.*

In this year a critical study is made of Burke's *Speech on Conciliation,* Macaulay's *Johnson,* Milton's *L'Allegro, Il Penseroso, Comus,* Shakespeare's *Macbeth,* Washington's *Farewell Address,* and Webster's *First Bunker Hill Oration,* with supplementary reading as before. Composition work is frequent. Grammar and rhetoric are reviewed. Important forms of oral discourse are studied by practice.

FRENCH

Prescribed six terms in the Science Course.

T 11. Elementary. *5 hours a week.*

Downer's *First Book in French,* through the thirty-first lesson.

T 12. Elementary. *5 hours a week.*

Downer's *First Book in French,* through the fifty-seventh lesson. François and Giroud's *Simple French.*

T 13. Elementary. *5 hours a week.*

Downer's *First Book in French,* completed. Lavisse's *Histoire de France.*

T 14. Elementary. *5 hours a week.*

Review in grammar. Daudet's *Neuf contes choisis,* Erckmann-Chatrian's *Madame Thérèse,* Marique and Gilson's *French Composition,* sight readings, Bouvet's *French Syntax and Composition.*

T 15. Intermediate. *4 hours a week.*

Review in grammar. Dumas' *Monte-Cristo,* Maupassant's *Contes choisis,* Bouvet's *French Syntax and Composition.*

T 16. Intermediate. *4 hours a week.*

Lesage's *Gil Blas,* Laurie's *Mémoires d'un Collégien,* Marique and Gilson's *French Composition.* Letter writing. Douvet's *French Syntax and Composition.*

The following terms are prescribed in the Arts Course for those taking French as second language.

T.1. Elementary. *5 hours a week.*

Downer's *First Book in French* through the fortieth lesson.

T 2. Elementary. *5 hours a week.*

Downer's *First Book in French* through the sixty-fifth lesson. Labiche et Martin, *La poudre aux yeux.*

T 3. Elementary. *5 hours a week.*

Downer's *First Book in French,* completed, and review. Daudet's *Neuf contes choisis* and Erckmann-Chatrian's *Madame Thérèse.*

T 4. Intermediate. *5 hours a week.*

Review in grammar. Composition, letter writing. Mérimée's *Colomba.* Roux's *Grammar and Composition.*

GREEK

Prescribed for those taking Greek as a second language.

T 1-2. Elementary. *5 hours a week.*

Pronunciation, etymology, forms and syntax are studied simultaneously. Text-book: White's *First Greek Book.*

T 3-4. Xenophon. *5 hours a week.*

Translation with practice in forms, syntax, etymology and composition. Sight reading. Text-books: Goodwin's *Greek Grammar;* Goodwin and White's *Anabasis,* one book the first term and three the second.

HISTORY

T 1-2. Ancient History. *3 hours a week.*

After a brief study of the prehistoric period and of the oriental nations, the entire period of Greek and Roman history through the Empire of Charlemagne is covered. Literature, art, industry, government, and contributions to later civilization, are particularly emphasized. This course is designed to prepare students for the New York State Regents' Examination in Ancient History. Collateral readings on assigned topics are required. Text-book: Morey, *Outlines of Ancient History.*

T 3-4. American History and Civics. *4 hours a week.*

This course covers American history from the period of discovery and exploration down to the present. Social, industrial and economic, as well as political development is emphasized. During the second term the federal, state and local governments are discussed. This course prepares for the New York State Regents' Examination in American History with Civics, or in Course C, Major Sequence. Text-books: Ashley, *American History;* Muzzey, *American History;* Boynton, *Actual Government of New York.* Collateral readings and reports on assigned topics are required.

Civics 1-2. Community Civics. *2 hours a week.*

This course meets the requirements of the State Department of Education, and is intended for first-year students. The services of the community and of government in general and the obligations of citizenship are emphasized. Text-book: Hughes, *Community Civics.*

ITALIAN

Prescribed for those taking Italian as a second language.

T 1. Elementary. *5 hours a week.*

A. Arbib-Costa's *Italian Lessons.*

LATIN

Prescribed six terms in the Arts Course.

T 1-2. Elementary. *5 hours a week.*

Grammar: etymology and syntax as prescribed for first-year students by the Regents' Syllabus. Practice in English-Latin and Latin-English exercises, including several pages of easy, connected Latin, with drill in the prescribed vocabulary. Text-book: Collar and Daniell's *First Year Latin,* New York Edition, revised by Thornton Jenkins: lessons 1-41, the first term; lessons 42-80, the second.

T 3. Caesar. *5 hours a week.*

Caesar's *Gallic War,* Book I, chaps. 1-12, 23-29, 50-54; Book II, chaps, 1-16. Ritchie's *Argonauts.* Grammar as prescribed by the Syllabus of the Regents, and vocabulary drills continued. Weekly exercises in Latin prose composition, based on the readings in Caesar. Text-books: Kelsey's *Caesar's Commentaries,* new edition; New York Supplement to Kelsey's *Caesar's Commentaries;* Allen & Phillips, *Latin Composition,* Part I.

T 4. Caesar and Nepos. *5 hours a week.*

Caesar's *Gallic War,* Book II, chaps. 7-18; Book III, chaps. 13-16; Book IV, chaps. 20-38; Book V, chaps. 40-44, 48, 49, 52; Book VI, chaps. 9-23; Book VII, chaps. 1-10 and 63-71. Nepos' *Life of Hannibal.* Grammar reviewed, with a few additional principles of syntax. Vocabulary drills continued. Weekly exercises in Latin prose composition are based on the text read. Text-books are the same as for T 3.

T 5. Cicero. *4 hours a week.*

The First and Third Orations against Catiline are read intensively. The Oration for Marcellus is read at sight. The principles of grammar are constantly reviewed. Weekly exer-

cises in Latin prose composition are based on the text read. Text-books: D'Ooge's *Cicero's Orations;* Allen and Greenough's *Latin Grammar;* Allen and Phillips, *Latin Composition,* Parts II-III.

T 6. Cicero. *4 hours a week.*

The Orations for the Manilian Law and for Archias are read intensively. The Fourth Oration against Catiline is read at sight. The principles of grammar are constantly reviewed. Weekly exercises in Latin prose composition are based on the text read. Text-books are the same as for T 5.

MATHEMATICS

T 1. Elementary Algebra. *5 hours a week.*

The four fundamental operations for rational algebraic expressions, factoring, fractions, simple equations, both numerical and literal, containing one or more unknown quantities. Text-book: Hawkes, Luby and Touton's *Complete Algebra.*

T 2. Elementary Algebra. *5 hours a week.*

Involution, evolution, radicals, quadratic equations, both numerical and literal. Simple cases of equations with two or more unknown quantities that can be solved by the methods of simple or quadratic equations. Binomial theorem, having positive integral exponents, ratio and proportion, and logarithms. Text-book: Wells' *Essentials of Algebra.*

T 3. Plane Geometry. *5 hours a week.*

Text-book: Durell and Arnold, *Plane Geometry,* Books, I-IV inclusive.

T 4. Solid Geometry. *5 hours a week.*

Text-book: Durell, *Plane and Solid Geometry.* Review of T 3 and Book V in addition.

T 5. Plane and Spherical Trigonometry. *4 hours a week.*

Text-book: Wentworth and Smith, *Plane and Spherical Trigonometry.*

T 6. Advanced Algebra. *4 hours a week.*

The theory of quadratic equations, graphs, ratio, proportion and variation, the progressions, logarithms, permutations and combinations, the binomial theorem, the theory of equations. Text-book: Fite's *College Algebra.* Regents' credit given for Intermediate as well as Advanced Algebra.

PHYSICS

Prescribed for two terms in both the Arts and Science Courses.

To the physical facts of home and out-door life are added the experience of the physical laboratory. First-hand contact with matter, electricity and energy precede description and interpretation. Memory work is limited to names of things (definitions) and laws (constant relationships between measured quantities). The classical concepts are developed as experience needs them but not as final, rather as an approach to modern viewpoints. Mastery and understanding limit the field covered. Groups limited to twenty-four and thirty students. Each student is responsible for apparatus entrusted to him and must replace breakage.

T 1. Mechanics, Heat, and Magnetism. *4 hours a week.*

T 2. Sound, Light, and Electricity. *4 hours a week.*

PUBLIC SPEAKING

A—The Correction of Speech Defects. *1 hour a week.*

All the students entering Class A of Townsend Harris Hall must present themselves for examination in oral English. Those who are found to have any defect of speech will be assigned to take this course. The work will consist of exercises adapted to the individual difficulties of the student and designed to habituate him to enunciate correctly all the sounds of spoken English and to use them smoothly in continuous, idiomatic discourse.

The successful completion of this course, or exemption from it by examination, is a necessary entrance prerequisite for all the college courses in Public Speaking.

SPANISH

Prescribed for those taking Spanish as a second language.

T 1. Elementary. *5 hours a week.*

Fuentes and François' *Spanish Grammar.*

T 2. Elementary. *5 hours a week.*

Fuentes and François' *Spanish Grammar, Trip to Latin America* and *Manual de Correspondencia.*

T 3. Elementary. *5 hours a week.*

Review of the grammar. Hill's *Spanish Tales;* Crawford's *Spanish Composition, Manual de Correspondencia.*

T 4. Elementary. *5 hours a week.*

Review of the grammar. Valde's *La Hermana Son Sulpicio;* Cool's *Spanish Composition;* Hills and Ford's *Spanish Grammar, Manual de Correspondencia.*

THE SUMMER SESSION, 1920

For more detailed information, see special bulletin.

The Summer Session, conducted in 1920, offered courses from the College of Liberal Arts and Science, the School of Technology, the School of Business and Civic Administration, and the Division of Extension Courses, and courses in Special Subjects. The Session was for a period of eight weeks, one-half that of the usual college term. Recitations in the various subjects were conducted for twice the usual number of hours, so that at the end of the session credit was awarded for credit courses in the usual manner.

The courses offered were conducted during morning, afternoon and evening hours of every day in the week, including Saturday. The total enrolment was distributed as follows:

Matriculated Students in all Schools:		
In the Day Session	1,301	
In the Evening Session	322	
		1,623
Non-Matriculated Students in regular college courses		743
Teachers of elementary and secondary schools, in special Teachers' Courses		159
Non-Matriculated students in special vocational subjects		407
Total Enrolment		2,932
Individual Students:		
Matriculated in all Schools		984
Teachers		153
In Vocational Courses		305
Total		1,442
Men		1,260
Women		182
Total		1,442

Organization

The Summer Session of 1920 was conducted by a director and a staff drawn from (*a*) the College of Liberal Arts and Science, the School of Technology, the School of Business and Civic Administration, the Division of Extension Courses, and (*b*) specialists from other institutions and the professions.

OFFICERS OF ADMINISTRATION AND INSTRUCTION

Sidney Edward Mezes, LL.D., *President*
Paul Klapper, Ph.D., *Director of the Summer Session*

The College of Liberal Arts and Science

BIOLOGY

George G. Scott, Ph.D., *Associate Professor*
Bertram T. Butler, A.M., *Instructor*
Herbert Ruckes, M.A., *Instructor*

CHEMISTRY

Louis J. Curtman, Ph.D., *Assistant Professor*
William L. Prager, Ph.D., *Assistant Professor*
William L. Estabrooke, Ph.D., *Assistant Professor*
Roy R. Denslow, A.M., *Assistant Professor, Smith College*
T. R. LeCompt, M.S., *Instructor*
Arthur Schutt, *Instructor*
Joseph A. Babor, A.M., *Tutor*
Edward E. Cohen, B.S., *Fellow*
David Hart, B.S., *Fellow*
Paul W. Cohen, *Fellow*
Moses Chertcoff, B.S., *Fellow*
Alexander Lehrman, B.S., *Fellow*
John E. Brolles, Jr., B.S., *Fellow*
Nathaniel Kleitman, B.S., *Fellow*
Harry Charos, B.S., *Fellow*

ECONOMICS

Thomas P. Kelly, A.M., *Special Instructor*

EDUCATION

Egbert M. Turner, A.M., *Instructor*
Sol Bluhm, A.M., *Special Instructor*

ENGLISH

Bird Williams Stair, M.S., *Assistant Professor*
Thomas W. Park, Ph.D., *Professor, Adelphi College*
John L. Foley, M.A., *Special Instructor*
Theodore Goodman, M.A., *Tutor*

GEOLOGY

Bertram T. Butler, A.M., *Instructor*

GOVERNMENT AND SOCIOLOGY

John E. Oster, LL.B., LH.D., *Tutor*
Thomas P. Kelly, A.M., *Special Instructor*

HISTORY

Nelson P. Mead, Ph.D., *Associate Professor*
Livingston R. Schuyler, Ph.D., *Associate Professor*
Homer C. Newton, Ph.D., *Associate Professor*
Howard C. Green, A.B., *Instructor*

MATHEMATICS

Frederick G. Reynolds, Sc.D., *Professor*
Arthur B. Turner, Ph.D., *Assistant Professor*
Maximilian Philip, Sc.D., *Assistant Professor*
George M. Hayes, A.M., *Instructor*
Samuel A. Schwarz, A.M., C.E., *Instructor*

PHILOSOPHY

John Pickett Turner, Ph.D., *Associate Professor*

PHYSICS AND ENGINEERING

Gerardo Immediato, C.E., M.E., *Assistant Professor*
Roy F. Leighton, M.S., *Instructor*
Theodore A. Smits, *Fellow*
Jerome Green, M.S., *Special Instructor*
Benjamin A. Wooten, Ph.D., *Professor in the Alabama Polytechnic Institute*
Charles J. Pickett, Ph.D., *Principal of the Boys' Vocational School*

PUBLIC SPEAKING

Erastus Palmer, A.M., *Professor*
Daniel W. Redmond, Ph.D., *Associate Professor*
Joseph A. Mosher, Ph.D., *Assistant Professor*
Joseph X. Healy, A.M., *Instructor*

The School of Business and Civic Administration

ACCOUNTANCY, ECONOMICS AND LAW

D. C. Eggleston, M.E., C.P.A., *Assistant Professor*
Homer A. Stebbins, Ph.D., J.S.D., *Lecturer*
William E. Collins, A.B., L.LB., *Lecturer, Law*
Arthur E. Albrecht, M.A., *Instructor, Economics*
Thomas P. Kelly, M.A., *Instructor, Economics*
Lewis Sayre Burchard, A.B., LL.B., *Instructor, Law*
Conrad J. Saphier, M.C.S., *Special Instructor in Accountancy*
Charles R. Taylor, B.C.S., *Tutor, Accountancy*
Meyer J. Ostrow, C.P.A., *Tutor*
Ulysses S. Tasch, A.B., LL.B., C.P.A., *Tutor, Accountancy*
George Dariff, C.P.A., *Tutor, Accountancy*
Simon J. Jason, M.A., LL.B., *Special Instructor, Accountancy*

ENGLISH

Michael J. Keleher, A.M., *Instructor*
Joseph X. Healy, A.M., *Instructor*

FOREIGN LANGUAGES

Robert J. Damen, *Instructor in French*
Alfredo Elías, Lic. en. Dro., *Instructor in Spanish*

PUBLIC SPEAKING

Thomas E. Coulton, A.M., *Tutor*

Special Subjects

SECRETARIAL COURSES

Arthur M. Sugarman, B.A., *Instructor in Stenography, Julia Richman High School. Special Instructor, Evening Session*
Conrad J. Saphier, M.C.S., *Chairman, Department of Stenography, Bay Ridge High School. Special Instructor, Evening Session*
Rose Lichterman, A.B., *Instructor in Stenography, New York City High Schools. Special Instructor, Evening Session*
Louis Brand, B.A., *Instructor in Stenography, New York City High Schools*
John V. Walsh, B.A., *Instructor in Stenography, New York City High Schools*

SPECIAL COURSES FOR TEACHERS

HAROLD FIELDS, M.A., *Instructor in Civics, Roosevelt High School*
Lecturer in Extension Courses
IDA E. FISCHER, B.A., *Special Teacher of Music, New York City Schools*
Lecturer in Extension Courses
HERMAN GRAY, M.A., *Instructor in History*
College of the City of New York
SIMON J. JASON, M.A., LL.B., *First Assistant in Commercial Branches, New York City High Schools*
ABRAHAM LONDON, M.A.,
Principal, P. S. 36, Brooklyn. Lecturer in Extension Courses
FREDERICK B. MARTIN, PH.D., D.O.,
Director of Speech Improvement, New York City Schools. Lecturer in Extension Courses.
MAXIMILIAN PHILIP, SC.D., *Assistant Professor of Mathematics*
WILLIAM E. REED, M.A., *Instructor in Civics, Manual Training High School*
EARL B. SLACK, M.SC.,
Chairman of Physical Science Department, Washington Irving High School
ARTHUR M. SUGARMAN, B.A., *Special Instructor in Evening Session*
CHARLES E. SPRINGMEYER, M.A.,
Principal, P. S. 85, Brooklyn. Lecturer in Extension Courses
EGBERT M. TURNER, A.M., *Instructor in Education*
ELIZABETH A. WALSH, B.S., M.A.,
Assistant Inspector of Ungraded Classes, New York City Schools

SPECIAL VOCATIONAL COURSES

DAVID B. STEINMAN, C.E., PH.D., *Supervisor of Automobile Courses*
PETER FOGARTY, *Lecturer on Automobiles*
HARRY E. WATKINS, *Lecturer on Automobiles*
FRANK J. LOWE, *Laboratory Demonstrator of Automobiles*
GEORGE W. POLLION, *Laboratory Demonstrator of Automobiles*
STEPHEN VAN DUSEN, *Laboratory Demonstrator of Automobiles*
COLUMBUS SPRATTO, *Laboratory Demonstrator of Automobiles*
HARRY J. MARX, *Laboratory Demonstrator of Automobiles*
ADRIAN VAN MUFFLING, *Laboratory Demonstrator of Automobiles*
JOHN H. ESTABROOKE, *Laboratory Demonstrator of Automobiles*
E. F. HALLOCK, *Laboratory Demonstrator of Automobiles*
M. P. DECKER, *Driving Instructor, Automobiles*
HARRY SELIGMAN, *Driving Instructor, Automobiles*
J. S. LASCH, *Driving Instructor, Automobiles*
LEO SIEGEL, *Driving Instructor, Automobiles*
A. R. MACCLEAVE, C.E., *Driving Recorder, Automobiles*
EDWARD RAEBER, *Mechanic, Automobile Course*
HENRY B. ARUNDALE, *Instructor, Textiles*
BERNARD BARUCH, A.M., *Instructor, Textiles*
SAMUEL A. SCHWARZ, A.M., C.E., *Special Instructor, Photography*
CHARLES GOTTLIEB, M.D.,
Special Lecturer, Interpretation in X-ray Photography

OFFICERS OF ADMINISTRATION

HOWARD C. GREEN, A.B., *Assistant to the Director*
HOMER C. NEWTON, PH.D., *Librarian*
MORTON GOTTSCHALL, A.B., J.D., *Registrar in Dean's Office*
WALTER STALB, *Bursar*
SAMUEL NEWMAN, *Assistant to Registrar and Bursar*

COURSES GIVEN IN THE SUMMER SESSION

I. From the Curriculum of the College of Liberal Arts and Science

BIOLOGY

1. General Biology.
23. Vertebrate Zoology.

CHEMISTRY

1-2. Descriptive Chemistry.
3. Qualitative Analysis.
4. Quantitative Analysis.
50. Organic Chemistry I.

ECONOMICS

1. Elements of Economics.
2. Evolution of Industry.
20. Money and Banking.

EDUCATION

11. The History of Culture and Education.
31. Principles of Education.
121. Educational Psychology.

ENGLISH LANGUAGE AND LITERATURE

1-2. Rhetoric.
3. The History of English Literature.

GEOLOGY

1. Elementary Geology.

GOVERNMENT AND SOCIOLOGY

1. American Government and Politics.
5. Elements of Sociology.

HISTORY

1. Medieval and Modern, to 1648.
2. Political History Since 1648.
4. Contemporary American History.
27. The World War.

MATHEMATICS

1. Solid Geometry.
2. Trigonometry.
3. Advanced Algebra.
4. Analytic Geometry and Calculus.
5. Calculus.
Trigonometry and Advanced Algebra.

PHILOSOPHY

1. Ethics.
5. General Psychology.

PHYSICS

1-2. Heat, Magnetism, Sound, Light, Electricity.
3. Mechanics, Wave Motion, Sound and Heat.
4. Magnetism, Electricity and Light.
5. Laboratory on Topics in Physics 3.
6. Laboratory on Topics in Physics 4.

PUBLIC SPEAKING

I. Expression

1-2. Principles of Expression.
3-4. Practice in Expression.

II. Public Speaking

5. Debate (First Term).
6. Debate (Second Term).
7. Extemporaneous Speaking (First Term).
8. Extemporaneous Speaking (Second Term).

II. From the School of Technology.

M.E.210. Forge and Foundry Laboratory.
M.E.220. Pattern Making.
M.E.122. Power.
C.E. 203. Surveying.
C.E. 223. Graphics: Framed Structures.

III. From the School of Business and Civic Administration.

ECONOMICS

130-131. Accounting I: Theory, Practice, and Problems.
230-231. Accounting II: Theory, Practice, and Problems; Corporation Accounting.
232. Principles of Cost Accounting, Bookkeeping and Office Practice (Special Course).
190. Introduction to Business Law—Contracts.
191. Sales Agency, Partnership, Insurance.

ENGLISH

201-202. Business English Composition. Business English (Special Course).

FOREIGN LANGUAGES

Spanish, 111-112. Commercial Spanish.
French, Elementary, Intermediate, and Third Term (Special Courses, in co-operation with the *Alliance Française*).

IV. Special Subjects

A. COURSES FOR TEACHERS

General Psychology.
Educational Psychology.
History of Education.

Principles of Education.
Methods of Teaching in Elementary Schools.
Method and Content in Literature, Composition, Grammar and Rhetoric.
Review of Elementary Mathematics.
Review of American History and Government with European Background.
Music in the Public Schools.
Community Civics: Content and Methods.
Methods of Teaching Commercial Subjects; Typewriting; Stenography.
Speech Correction, Theory and Clinic.

B. SECRETARIAL COURSES

Stenography, Elementary, Intermediate and Advanced.
Typewriting, Elementary and Advanced.
Special Intensive Courses in Stenography and Typewriting.

C. SPECIAL VOCATIONAL COURSES

Automobile Course.
Advanced Automobile Course.
Photography, Elementary and Advanced.
Radiography.
Textiles 1.

COMMENCEMENT

June 24, 1920

THE AWARD OF PRIZES

The Pell Medals

To the students who rank highest in all the studies of the year:

Gold.....Maurice Iserman
Silver.....George Edwin White

The Cromwell Medal

For proficiency in History.....Solomon Traub

The Ward Medals

For greatest proficiency in:

Chemistry.....Harry Charos
Natural Philosophy.....Herbert J. Stark and Henry S. Semat
Economics.....Bernard Kurz
Government.....Maurice Iserman
English.....Fred Marcus Miron
Latin.....Joseph Horn
Greek.....Harry T. Zankel
French.....Louis Rosenthal
Spanish.....Samuel Barkan
Composition.....John F. X. Finn
History.....James E. Flynn
Certificate of Equal Merit.....Matthew Finkelstein
Algebra and Geometry.....Sidney James and Harry Yarnitsky
Descriptive Geometry.....Joseph Meyer

The Riggs Medal

For the best English Prose Composition.....Joseph Ragusa

The Kelly Prize

To the writer of the best critique in the two Literary Societies,
Bernard Hurwitz

The Claflin Medals

For proficiency in Latin:

Silver.....Louis A. Friedman
Silver.....Abraham Hornestay

The Belden Prizes

For excellence in pure Mathematics:

Silver.....William Herberg
Silver.....Everett R. Levy

The Ketchum Prizes

For proficiency in the History of Philosophy:

First.....William Needles
Second.....Joseph Horn

For proficiency in Economics:

First .....George Williams
Second .....Samuel Goldstein
Honorable Mention .....Aaron Furman

The Roemer Prize

For the best Poetry Declamation:

Leo I. Newman (Fall) and Edward Eliscu (Spring)

The Bennett Prize

For the best Essay on a subject of American governmental policy:

Frederick Oliver Holmes

The Ralph Weinberg Memorial Prize

For the best English Poem on "The Living Dead"..William Robert Macleod

The Prager Memorial Prize

To the Senior receiving the highest aggregate mark in his studies for the year.....Jacob London (Feb.) and Maurice Iserman (June)

The General Tremain Prizes

For the best Essays on the theme "Causes, Conduct, and Conclusion of the Great Civil War in the United States":

First .....Louis Silverstein
Second .....Bernard Hurwitz

The James R. Steers Prize

For excellence in the Department of Art:

Hyman Cohen and David J. Schwartz

The Meyer Cohn English Prize

For the best English essay by a member of the graduating class:

Morris Rosenblum

The Prize of the Board of Trustees

For the best Oration:

Jacob Wahrhaftig (Fall) and Henry Miller (Spring)

The Freiberg Memorial Prize

For the second best Oration:

George Friedman (Fall) and Leo J. Linder (Spring)

The Prize of the Colonial Dames of the State of New York

For a dissertation on a subject connected with American Colonial History:

Louis Silverstein

The Divinsky Medal

For greatest proficiency in Oratory.....Alexander H. Uhl

The DuPont Fellowship

For research in Chemistry.....Myron Hirsh

SECOND YEAR HONORS

Highest Honors

For having attained by the close of the second year, the grade A in courses counting at least 50 *credits, with the remaining grades B:*

Samuel Rosenblatt

Honors

For having attained by the close of the second year, the grades A and B in prescribed courses counting at least 55 *credits:*

George Birnbaum
Solomon Liptzin
Norman Papae
Lawrence H. Sophian
Louis Tanner
Leonard Tarr
Isidore S. Wolfsohn
Joseph Yaswen

Leo Dressler
Isaiah Heller
William Herberg
Myron Hirsh
Theodore G. Holzager
Solomon Katz
Isaac Klebanoff
Israel Kramer
Simon H. Rifkind
Henry S. Semat
Joseph E. Wisan

GRADUATION HONORS

Degree summa cum laude

For having received the grade A in courses counting at least 115 *credits, with the remaining grades all B:*

John F. X. Finn

Degrees cum laude

For having received the grades A and B in courses counting at least 120 *credits:*

Dante Edward Broggi
Maurice Iserman
Simon Sonkin

DEGREES CONFERRED

Bachelor of Arts

Beuerman, George Koerner
Broomer, David
Buckowitz, Pincus M.
Burney, William Samuel
Goldberg, Harry I.
Goomnitz, Morris
Harris, Joseph R.
Jackson, Wesley Stevens
Karsten, Edward H.
Macleod, William Robert
McGee, James Vincent
Mandracchia, Raymond
Polk, Irving
Principe, Amedeo
Rosenblum, Abraham J.
Shanley, Edward James
Shopenn, Isadore
Trosten, David
Tulgan, Joseph

Gellman, Jacob
Handelsman, Benjamin
Kalvesky, Louis
Lebofsky, Harry B.
Paleg, Leon
Rosenstock, Jesse Metzger
Schreiber, Martin
Tritt, Harold
Walters, Irving

Barnett, Benjamin
Bernstein, J. L.
Berson, Charles
Brennan, Raymond C.
Brokhahne, Van Rensselaer W.
Brooks, Philip
Cohen, Alexander
Cohen, Harry
Colin, Ralph F.
Doman, Leon H.
Fanning, Harold Jerome
Freiberg, Emanuel Joseph
Goodfriend, Sidney
Goodman, Jerome
Greenblatt, Harry A.
Grossman, Harry
Heilbraun, William
Hogenauer, Alphonse Stewart
Hutner, George E.
Iscol, Fred
Kammitter, John A.
Kellogg, Dwight
Kolburne, Luma Louis
Kramer, Leon
Krengel, David
Lance, Saul J.
Leibson, Morris
Livoti, Paul
Mallin, Albert M.
Rebhuhn, Benjamin
Sachs, Abraham
Seitelman, Solomon
Siegel, William
Simon, Benjamin
Statt, Herbert M.
Stein, Jacob Z.
Sugarman, Robert R.
Swerling, Albert
Walz, Joseph Edward
Weiser, Jacob A.
Zweigel, Isidore

Balty, Philip
Ball, William
Bartelt, George William
Beckenstein, Maurice
Bernstein, Edward
Bleibtreu, John Edwin
Braverman, Louis
Canonico, Joseph J.
Cohen, Edward L.
Cohen, Harry L.
Davidson, Max H.
Dixon, Robert
Drachsler, Leo M.
Feuerstein, Abraham
Finkelstein, Joseph Frank
Finn, John F. X.
Friedman, Abraham
Friedman, George
Friedman, Hyman
Garlock, Edward
Gatof, Herbert S.
Goldwyn, David Leonard
Gottlieb, Charles
Green, Solomon E.
Greiff, Morris Louis
Gross, Bernard
Holmes, Frederick Oliver
Hyman, Joseph
Kantor, Ira H.
Katzenellenbogen, Nathan M.
Klein, David
Korn, Charles
Kresch, Maxwell
Lazinsky, Samuel B.
Linder, Leo J.
Lipschitz, Max
Magee, Sigmund
Marcus, Joseph
Meltzer, David
Miron, Fred Marcus
Murray, John J.
Pause, George Dewey
Polinger, Elliot H.
Poris, Max M.
Ragusa, Joseph
Rosenblum, Morris
Roskin, Hyman
Ross, Sanford B.
Saetz, Morris Emanuel
Schimel, Adolph
Schwartz, David J.
Schwartzfarb, Morris B.
Shapiro, Benjamin Joseph
Silver, Philip
Singer, Morris L.
Sulman, Leo
Tepper, Jacob
Uhl, Alexander H.
Waldbaum, Irving I.
Weinberger, Arthur C.
Yaconetti, Anthony J.
Zuckerbrot, Herman H.
Zuckerman, George

Bachelor of Science

Braunstein, Louis
Brill, Edward
Drabkin, Isidore
Engelmann, William Oscar
Freehill, James Edward
Friedlander, Jean Emanuel
Hodes, Alfred L.
Hogg, Alexander J., Jr.
Kaufmann, Jesse F.
Kenny, John B.
King, Ivan Decker
Kreisberg, Maurice J.
McKay, Gordon Angus
Melden, Jerome Leslie
Morris, Walter F.
Shaftan, Leonard
Siegel, Leo
Sweeney, Francis J.
Toole, William Carey
Van der Bent, Arthur C.
Waltman, Samuel

Goldstein, Abraham L.
Levine, Philip
Ruderman, James
Scholnicoff, Charles S.
Seidlitz, Hyman Wm.
Seif, Joseph B.
Sosnen, Samuel
Till, Solomon
Wilpan, Morris H.

Behrens, Arthur
Berman, Benjamin
Bloom, Sidney J.
Blumberg, Abraham
Charos, Harry
Clark, Daniel J.
Cohen, Milton M.
Cunningham, Richard James
D'Atri, Americus
Drogin, Joseph
Fliegel, Hyman J.
Frieden, George
Goldman, Benjamin Sheppard
Greenberg, David
Hirsch, Leopold
Hirsh, Myron
Horowitz, Leo
Kamener, Louis
Kantor, Abraham
Kaplan, Morris
Kertes, Ferdinand
Krown, Louis
London, Jacob
Nadel, Edward I.
Norton, William Joseph, Jr.
Peshkin, Jacob
Ross, Sandor K.
Seskis, Irving J.
Shear, Murray J.
Shinedling, Julian
Shomay, Barney
Skidelsky, Hyman
Slater, Abraham
Smits, Theodore A.
Suttenberg, Michael P.
Swift, Max
Umschweif, Maurice
Weisner, Louis
Wren, William Patrick
Zinn, Philip

Arnstein, Arnold
Aronchick, George C.
Ashe, Benjamin
Berg, Louis J.
Berger, Milton M.
Berkowitz, Max
Berkson, Joseph
Broggi, Dante Edward
Cohen, Hyman J.
Cohen, Paul W.
Dash, Abraham J.
Floeting, Charles August
Fordham, Benjamin H.
Fox, George S.
Friedmann, Herbert
Gelbstein, Nathan J.
Goldberg, Abraham J.
Goldstein, Samuel

Grayzel, Harold G.
Graziadei, Humbert J.
Greenfield, Maurice
Grelick, David
Gross, Harold J.
Grunen, Max
Guest, Leslie Peirce
Harsany, Charles J.
Israel, Martin
Jungermann, John Joseph
Kaplan, Julius
Katz, Abraham M.
Langer, Meyer
Lesser, George
Levitas, Benjamin
Levy, Irwin Martin
Lilienbloom, Frank
Lipnick, Arthur
Livingston, Ira B.
Minikes, Max
Nelson, Solomon
O'Connor, John Arthur
Pratt, James Karl Williams
Prudowsky, Isidor B.
Rabinowitz, Max S.
Rodes, Gabriel
Rosenblatt, Maxwell
Rosenheck, Joseph
Sachs, Wilbert
Sand, Harvey
Scheiner, Frank Samuel
Sherry, Joseph
Sonkin, Simon
Spielberg, Joseph M.
Springer, Jacob
Stueber, Albert H.
Supnick, Louis
Taft, Arthur
Taub, Jacob H.
Tepper, Abraham
Wallerstein, Abraham
Weissberger, Stephen
Wendell, Benjamin
Williams, George
Wolfe, Max

Bachelor of Science in Social Science

Albert, Henry
Alben, M. H.
Cottin, Jacob
Furman, Aaron
Green, Joseph J.
Gussow, Mortimer C.
Hofmann, Max
Iserman, Maurice
Kuntz, Abraham
Lipton, Irving
Nicholls, John Francis
Silver, Edward S.
Rapps, Samuel M.
Richter, Herman L.
Silverstein, Louis
Traub, Solomon

DIPLOMAS CONFERRED

Graduate in Accountancy

Alberts, Irwin M.
Barnett, Reuben
Burstein, Harry
Bushlowitz, Benjamin
Cavo, Lawrence A.
Eiger, Joseph
Eisenstein, Edward H.
Fein, Raphael J.
Greve, Richard
Hayes, James V.
Heims, Nathan
Hirsh, Irving
Hope, Richard Andrew
Horowitz, Nathan
Hyde, William J.
Kaiser, Abraham A.
Kingston, Samuel
Kopekin, Leo
Kruglov, Louis
Kulok, David
Lippman, Samuel
Mandel, Nathan
Raphael, William M.
Scardaccione, Matthew
Schwartz, Morris A.
Seiden, Louis
Shyatt, Louis S.
Siegel, Martin A.
Sprayregen, Hyman
Verbitsky, Abraham
Walerstein, Daniel S.
Warmflash, Joseph
Weisen, Louis
Weiss, Abraham
Wiesenthal, Herman
Zabronsky, Max H.

ENROLMENT

For the Term Ending in January, 1921

STUDENTS IN THE DAY SESSION

College of Liberal Arts and Science

A=Arts. *S*=Science. *SS*=Social Science.

UPPER SENIOR CLASS

A Adelson, Isidore E.
S Baer, Herbert L.
S Blay, Leon
A Blom, Carl A.
A Blum, Isidore
SS Boetticher, Curt V.
S Brode, James I.
S Byck, Louis
S Carlin, Benj.
A Carruth, Frederic C.
SS Cohen, Abraham
S Cohen, Hyman
SS Cohen, Jacob
A Cohen, Lee
S Cooperstein, Hyman Harry
S Epstein, Harry N.
A Folman, Leon N.
S Franzblau, Abraham N.
S Gehan, Raymond F.
A Ger, William
S Ginsburg, Abraham M.
A Gluckstein, Isidore
A Gottlieb, Philip
SS Gratzner, Raymond I.
S Gurchot, Abel Charles
SS Halpern, Meyer
S Hanfling, Harry
S Held, Murray (Moses)
A Hirsch, Hyman
A Hirschtritt, Isidore
S Hollander, Irving
A Horn, Joseph
S Horne, Frank S.
A Hurwitz, Bernard
S Jacobi, Mendel
SS Janowsky, Oscar I.
A Katz, Alexander G.
S Klein, Henry
A Kronfeld, Herbert E.
A Krinsky, Nathan
SS Kosloff, Samuel
S Kwass, Abr.
A Lazer, Abraham
S Lehrman, Leo
S Leibowitz, William
S Levien, A. Mark
S Levin, Nathan
SS Levine, Aaron
S Lichtenstern, Arthur W.
A Liptzin, Solomon
A Maltz, Jack
A Miller, Henry
A Morell, Barry
A Movshovitz, Henry
S Mulready, Eugene L. T.
SS Needleman, Israel
A Needles, William
SS Paiewsky, David
SS Patterson, Robert
A Rague, Harold S.
A Redner, Henry
A Rose, Morris
A Rosen, William R.
A Rosenthal, Louis
A Rudinsky, Samuel
A Sainer, Abraham
S Samet, Jerome
A Seif, Hyman
S Siegel, Abraham
S Solomon, Julius
A Steinberg, Samuel
A Stewart, David R.
A Streicher, Sam
S Tanner, Louis
S Thuor, Louis
S Turetsky, Morris
S Weintrob, Morris
A Weisbord, Albert
S Zemansky, Mark W.

LOWER SENIOR CLASS

S Appold, George Dewey
S Barnett, Israel
S Berger, Tobias
S Berlage, Irvington
SS Bernstein, Herman
S Birnbaum, George
S Borodkin, Abraham
A Botwin, Nathan M.
S Bratspies, Benjamin
A Broder, Israel
SS Bublick, Emanuel
A Caruso, Barnett L.
SS Chovenson, S. H.
A Cohen, Emanuel
S Cohen, Samuel
S Donaldson, Frank
A De Rosa, John
S Dlugatz, Hyman
A Dressler, Leo
SS Eliscu, Edward
SS Ellenoff, Louis
A Ewen, Francis
SS Feigin, George
S Fink, Harold
A Finkelstein, Herman
S Fischl, Arthur A.
S Fourman, Victor
S Friedman, David H.
A Ginsberg, I. Leon
S Goldberg, Barnet
S Goldsmith, Benjamin
S Goldstein, David S.
S Goolker, Peisach
S Greenstein, Harry
A Grossman, Alexander
S Grossman, Max
SS Hamburger, Gustave
S Heberlein, Arthur A.
S Hecht, Nathan

A Heller, Isaiah
S Honan, Charles J.
SS Horowitz, Arthur
S Huber, Samuel S.
S Hyman, Samuel W.
SS Inselbuch, Simon
SS Jacobowitz, Hyman
S Jacobs, Morris
S Kamenetsky, David
S Katz, Isidore
S Kisver, Harry
SS Kruth, Neils V.
A Lamm, Stanley S.
S Lauchner, Abraham J.
A Lapan, Isidore
SS Lebowsky, Abr.
A Lepowsky, Raphael
S Levinson, David
A Levitch, Julius D.
SS Lewit, James
A Liebreich, Leon
A Lifschitz, Henry
S Littenberg, M. S.
SS Lublin, Isidore
A Malnovitch, Philip
S Marcon, Milton
SS Maronlis, Anthony
S McCracken, Wilfred Hawthorne
A Merkelson, Julius
S Michaelis, Walter Harold
A Miller, Jasper
S Mond, Morris
S Moness, Elias
S Murray, Frank A.
SS Nasanowsky, D. L.
A Nathan, John B.
A Newfield, Max
S Newman, Irving
SS Nunes, Kenneth
A Papae, Norman
S Pincus, Leonard
SS Pokart, Simon
S Popkin, Maurice Herman
A Rosenblatt, Samuel
A Sabato, Frank
S Sang, Louis
S Sargoy, Edward A.
S Schapiro, Isidore
SS Schechtman, Saul
S Scheinker, David
S Seligman, Harry
SS Seligson, Harold P.
A Sellinger, Ben
S Sherman, Leo D.
S Sherman, Murray
A Shimberg, Ira
S Sicular, Henry
SS Siegel, Samuel
S Skach, Herbert S.
S Smith, Bernard
S Solomon, Isidore
S Stark, Herbert J.
A Strongman, Henry R.
SS Studley, Liba Harold
S Sussman, Henry ,
S Swift, Edward M.
S Tarr, Leonard
S Ullman, John
A Ulmar, David
S Wahrhaftig, Jacob
S Whiteman, Neville
S Wilkes, Barnett
S Wolfsohn, Isidore S.
S Young, Martin

UPPER JUNIOR CLASS

SS Algase, Benjamin
SS Ashworth, Irving F.
A Astrowitz, Jacob M.
S Bander, Morris
S Berlinsky, Harry D.
S Berman, Abraham
S Bisgier, George
SS Bloch, Joe
A Boss, Alfred J.
A Brown, Isaac
S Burg, Harold
S Cacioppi, Thos.
A Cedarbaum, David
S Chernuchin, Robert
SS Cohen, Samuel
SS Coll, Harry S.
A Corso, Joseph A.
S Cronenberg, Sampson
S Crownfield, Frederic R.
S Emmer, Samuel W.
S Factor, Philip
S Finkel, Abraham
S Fischer, William A.
SS Fishlowitz, Benjamin
S Fliedner, Leonard J.
S Fogelman, Hyman
A Garratt-Phayme, Thos. A.
S Giambalvo, Anthony
A Giannattasio, Joseph M.
A Glasgal, Isidore
SS Grande, Isidor
SS Greenberg, Morris
SS Grehan, Martin J.
S Gross, Alex
S Grouf, Meyer
S Hartman, Irving M.
A Heller, Solomon
S Herberg, William
S Holzsager, Theodore G.
A Hornestay, Abraham
S Jacobs, Edward
A Jacobs, Melville
S Jonas, Jerome
S Kalkut, Adolph M.
S Kammins, Herman
SS Karp, Max
S Katz, Solomon
SS Krause, Sydney
S Lederman, Joseph
SS Levine, Irving
S Levine, Isidore
SS Levine, Nathan
S Levy, Joseph
S Lindenauer, David
S Lindroth, Lawrence V.
S Loccisano, James
A Lubowitz, Nathan
A Maloff, Milton
SS Margulis, Herman
S Mattikow, Bernard
S Mattikow, Morris
S Maynard, De Lambert
S McTague, Lawrence J.
A Mozson, Henry
A Munies, Alexander
A Naparsteck, Harry
S Newman, Harry
A Oberman, Hyman
SS Ottenstein, Solomon
SS Rabkin, Louis
A Rappaport, Arpad David
A Redding, Arthur F.
SS Rifkind, Simon H.
S Scerbo, Frederick
A Scheinman, Bernard
S Schechter, Joseph
S Schenkman, Harry
SS Schlesinger, Emil
SS Schweizer, Jacob
A Segal, Judah
S Semat, Henry
S Silverman, Samuel
S Smith, Joseph
S Sobel, Isidore
S Sokoloff, Peter
A Sophian, Lawrence H.
A Stahl, Benjamin
A Stambler, Benedict
S Stander, Philip
A Stein, Samuel
S Unz, Adolph
SS Wagner, Max
SS Waissar, Irving
A Weintraub, Meyer
A Weiss, Emanuel
S Wendroff, Nathan
S Wesler, Abraham

SS Yaffe, Louis P.
SS Zimmerman, Kurt A.
S Zohman, Isidore

LOWER JUNIOR CLASS

SS Achinstein, Asher
S Albin, Joseph
A Alper, Isidore
S Anzelewitz, Abraham
SS Attinson, David Jos.
S Banchefsky, Louis
SS Behr, Eugene
S Beinhart, Samuel
A Berger, Israel
SS Bobker, Lawrence
S Bonadio, Colagero J.
S Bonatsky, David
S Bonyay, Lacy
S Brandenburg, David
SS Brin, Saul
S Brooks, Morris
A Bruch, Alvin
S Bursky, Abraham S.
A Burston, William
A Carlin, Francis W.
S Chasnoff, Julius
A Chernow, David
SS Chyat, Rubin
S Clapp, Henry B., Jr.
S Cinamon, Lionel
A Cohen, Barnet
S Cohen, Maurice S.
SS Craig, Robt. Thibaud
A D'Agostino, Vito
S Dargo, Nathan
S Diamond, H. Elias
A Dotzler, Louis
SS Drescher, Henry
SS Efron, Jacob
SS Egan, John
S Einhorn, Aaron W.
S Eisen, Jacob
S Fagin, Paul
SS Fanning, Joseph M.
S Finkelstein, Israel
S Fisher, Henry G.
A Flynn, James E. C.
A Flynn, Sylvester
A Fortgang, William
S Franchina, Benedict
SS Franzblau, Abraham
SS Friedman, Emanuel
SS Friedman, Nathan
S Friedrich, Martin
S Fusco, Alphonse A.
S Garofalo, Michael
SS Gerber, David
S Gertler, Samuel I.
S Gilbert, Reuben
SS Goldberg, Charles F.
S Goldberg, Harry
S Golder, Herbert
A Granowitz, Jacob
S Griswold, Frederick
S Gussow, Morris L.
SS Hartman, Sidney
S Helpern, Milton
S Herskowitz, Isidor
A Higger, Michael
S Hoeflinger, Louis J.
S Horowitz, Moses
A Jacobson, Sheldon A.
S Jacobson, Samuel
S Jones, Frank J.
S Kaplan, Harry
S Katz, Herman
S Kelly, Robt. E.
S Kennedy, Francis G.
A Kennedy, Martin R. G.
S Konowalow, Ben
A Kramer, Daniel
S Kronish, Abraham
SS Landau, Max
S Latter, Isidore L.
S Leifer, William
S Leiserowitz, Nathan
S Levein, Chas.
A Levenson, Isador
A Levy, Herbert
SS Lewis, Merwin
A Linder, Meyer
S Lipman, Herman
S Littman, Samuel
S McKay, Donald R.
S Mandel, Isidor
A Martin, Christopher W.
SS Menkes, Harry
S Michaels, Michael
S Milchman, Jacob
SS Milutinovich, Jezdimir
A Mins, Henry F.
A Mostow, Hyman
S Nanton, Hugh I.
A Nicastri, Daniel
S Nyer, Edward
SS Oremland, Irving
SS Oseas, Israel
S Pepper, Sidney
A Perlmutter, Bernard
A Pfeffer, Herman
S Pick, Theodore
A Plevy, Abraham Vincent
S Proshansky, Max
A Rabinovitch, S. Milton
S Rabinowitz, Joseph
SS Raskin, Harry A.
S Rasmussen, William A.
S Ratner, Hyman
S Rausch, Max
S Reich, Abraham J.
SS Resnikoff, Eli
S Rifkin, Samuel
SS Roemmele, Walter L.
S Rothberg, Abraham S.
SS Rowley, James F.
S Russo, Sal V. H.
SS Sackin, Louis
S Savitsky, Nat
S Salinger, Morris
S Schnell, James J.
S Schoelt, Abraham H.
S Schoen, Leo
SS Schonbrun, Henry
SS Schreiber, George
S Schults, George
A Schwartz, Louis
SS Selzer, Louis
SS Shalvey, Sylvester Joseph
S Sherman, Hyman
S Sigal, Wm. H.
S Seltzer, Max
S Silverman, Samuel
A Simpson, Leonard P.
S Siskind, William
S Smith, Alonzo de Grate
SS Smith, Harold
A Smith, James B.
S Spitzer, Nathan
S Tapparo, John A.
S Taylor, Harry
A Turner, Bernard
A Tynes, Harcourt A.
S Vesell, Moe
S Volodarsky, David
S Washeim, Henry
SS Weisberg, Barney
S Weiss, Sigmund
S Wilensky, Max
SS Wisan, Joseph E.
SS Wittner, Abraham
S Wolff, Leo
S Worken, Barney
S Zimmerman, Harry
S Ziprin, Joel
S Zitner, Benj.
S Zorn, Lewis E.
S Zucker, Benjamin

UPPER SOPHOMORE CLASS

S Amron, Max
A Annable, Harold D.
A Anderson, Clifford
S Angrist, Alfred
S Apfelbaum, Percy Max
S Arlt, Robert E.

S Aronowitz, Isadore
S Balatowsky, Harry
SS Baron, Melvin
S Barry, Lyman F.
S Basson, Richard
SS Becker, David S.
A Begg, Roy
S Berkovsky, Max
S Berman, Joseph
S Berman, Meyer S.
S Bernstein, Irving
S Biondo, Thomas
S Birnbaum, Silas J.
S Bonaccolto, Girolamo
S Broudy, David
S Brounnoff, George
S Bronstein, Irving
A Brownstein, Morris B.
S Budin, Jacob
S Cohen, Clarence
S Corriero, William
SS Craig, Robert L.
S Cuba, Moses
A Delaney, Hubert T.
S De Phillips, Nunzio
SS Deutsch, Arthur
S Deutsch, Ralph
S Diamond, Arthur
A Dickstein, Solomon
A Dinin, Samuel
SS Ditolla, Alfred C.
S Dolowitz, Nathan
S Edelstein, Isidore L.
S Ehret, William F.
A Epstein, Isadore
SS Feinberg, Horace B.
S Ferrara, Jos.
S Filler, William
SS Fishbein, Abraham
S Fix, William F.
S Fliegel, Jonah
SS Fluegelman, David B.
A Friedman, Louis A.
S Furman, Matthew
S Gellar, Abraham
A Gendell, Louis
S Glanzer, Joseph
S Glassgold, Adolph
A Glassman, Michael
S Goldberg, Abr. M.
A Goldman, Leonard
S Goldstein, Louis N.
S Goldstein, Samuel
A Green, Louis
S Greene, William
S Greenberg, Aaron E.
S Greenberger, Morris
A Hauptman, Nathan
S Haut, Arthur
SS Harkavy, Emanuel Ed.
A Haas, Alfred P.
A Haas, Eugene
S Helfond, David M.
S Herman, Leo
S Hoffman, Alfred L., Jr.
S Hoffman, Jacob
S Iscolsky, George
S Jacobs, Barrett
S Jacobs, Solomon
SS Jackson, William
S Jampolsky, Isaac
A Jerenberg, Jacob
S Joffe, Julian A.
A Kamenoff, Ralph J.
S Kaiser, Harry
SS Kirschstein, Isidore
A Kneital, Herman
SS Kraus, Michael
S Leboff, Isidore Wm.
S Lebowitz, Samuel H.
S Lefkowitz, Mortimer
S Leibowitz, Harry
A Levine, Alexander M.
A Levine, Benjamin
S Levy, Wm. T.
SS Lovitz, Abraham
S Lubetsky, Isaac
S Margolin, Samuel
A Marx, Jacob
S Matlofsky, Harry
S Mendelson, Emanuel
S Menkin, Valy
S Meyer, William
S Michaels, Isidore
S Miletsky, Morris
S Milgram, Harry
S Miller, Isidore
S Mindel, Louis
S Miodownick, Albert
S Mollin, Simon
A Mortkofsky, Benj.
S Mondzak, Morris
A Murray, William
A Nagelberg, Moses
S Nathanson, Max B.
S Nelson, George E.
A Nitsberg, Morris
S O'Neil, Thomas
S Paley, Samuel
S Parisi, Francis G.
S Parmet, David
S Pedro, George F.
S Pfister, Alexander C. E.
S Phimister, Charles
S Pick, Arthur
SS Pickney, Joseph
S Port, Morris
S Preisman, Louis
SS Prerau, Sydney
S Pupek, Bernard
SS Raskin, Jacob
S Raskin, Morris
A Ratner, Joseph
A Reich, Edward
S Reich, Samuel B.
S Reis, Sylvan
S Roof, Sidney
S Rosen, Samuel
S Rosenthal, Samuel
S Rubenstein, Samuel
A Resnick, Nathaniel H.
A Roseman, Isador
S Roseman, Morris
S Sandler, Morris
S Schaffer, Alexander
S Scharf, John H.
S Schatanoff, Louis
S Schein, Gabriel
S Scholder, Bernard M.
SS Schworm, Gustave B.
S Segal, Louis
S Sessler, David
A Sewell, Ashton L.
S Shapiro, Maurice A.
S Sheftman, Morris
S Shapiro, Meyer J.
S Sheinin, Benjamin
S Shendowitz, Alexander
SS Shmunis, Abraham N.
S Shrinsky, Max H.
S Silver, Morris
A Simons, Mortimer
S Siskind, Leo
S Smoldern, Ferdinand
SS Sokol, Gustave
S Solomon, Nathan
S Stern, Charles
S Topkin, Isidore
S Tumen, Abraham O.
S Valensi, Maurice J.
S Wagner, Samuel
S Warpick, Matthew
SS Warsoff, Louis A.
S Weinberg, Walter
S Weiner, Irving P.
S Weinstein, Fred
S Weinstein, Harold Leon
S Weintraub, Samuel H.
S Weiss, George
SS Weisberg, Abraham L.
SS Weiser, Fred
A Weisman, Samuel
S Wolcott, John R.
A Wolfe, Sidney
SS Wolff, Walter H.
A Zankel, Harry T.

LOWER SOPHOMORE CLASS

S Abramson, Marcus
S Alperin, Benjamin

S Amendola, Frederick H.
S Andujar, Alphonse
A Anzalone, A. Thomas
S Ariola, Vincent
SS Avrutis, William J.
S Axtell, Theodore F.
S Barkan, Samuel
S Bauer, Arthur S.
S Bauer, John
S Benjamin, Bernard
S Beris, Isidore
S Berman, Simon
S Bialostosky, Julius
S Bein, Adolph F.
A Bierman, Samuel
S Blankfeld, Nathan
S Block, Leon
S Blum, Joseph
S Blumstein, David
A Bragin, Moses
S Broggi, Arnold R.
S Broones, Martin J.
S Cohen, Irving F.
A Cohen, Louis
S Connor, Jerome N.
S Curran, James A.
S Davidhoff, Morris
S Davis, Isaac
S Delman, Isidore
S Ebel, William J.
SS Eisenstein, Sigmund
A Engelson, David
S Fainaru, Herscu
S Falcon, Leon
S Fass, Moses M.
SS Feierman, Alexander
SS Feingold, Maurice
S Feld, Harry
S Felix, Joseph
S Ferber, Louis
SS Flamm, Julius
S Flanzer, Joseph A.
A Flynn, Raymond
S Forshner, Julius
S Foxe, Arthur N.
S Frankenberg, Harry
S Friedberg, Solomon
S Friedman, Edward
SS Frost, Abraham
S Fuchs, Abner
S Gartner, Samuel
S Geshwind, Morris H.
S Gialias, E. George
S Gibbons, Gerald
A Gilbert, William
SS Glantz, Edwin B.
S Goldat, William
S Goldberg, George
A Goldman, Max
S Goldschlager, Abraham J.
S Goldstein, Abr. D.
A Goldstein, Alexander
S Goldstein, Louis J.
S Goldstein, Max S.
A Greene, Nathan
SS Gross, Frank
S Gross, Harry
S Grossman, Benjamin
S Grossman, Howard
S Hahn, Morris
S Hartman, Isidore
S Hayter, Bruce
A Heller, Nathan
A Henry, Thomas V.
S Henzel, Herbert T.
SS Herlich, William E.
S Hoffberg, William
SS Hook, Sidney
S Horowitz, Philip
SS Hubbard, Raymond O.
S Interrante, Michael
A Ivans, Edwin
S Jacobs, Julius
S Jacobs, Samuel
S Japhe, Nathaniel M.
S Joseph, Louis
S Kameny, Samuel
S Kaplan, Daniel
A Katz, Bernard J.
A Katz, Solomon
S Katzoff, David
A Kaufman, Charles
S Kaufman, Israel
S Kershner, Morris M.
S Klatzkow, Philip
S Kline, Max
S Knapp, Max
S Kolbe, Henry
S Kozak, Hyman
S Kurz, Bernard
S Lampner, Kalman
S Lascoff, Dudley
S Lassman, Samuel
SS Lehman, George Otto
S Levine, Abraham
S Levine, Milton
SS Levy, Daniel
A Lieberman, David
S Lieberman, Hyman
S Lief, Harold
SS Linowitz, William
S Littlefield, Frederick Russell, Jr.
S Loewenstein, Samuel
S Lubetsky, Benjamin
S Lukin, Nathan
S McBrien, Hugh
S Machelowitz, Sam
S Machlis, Meyer
S Matusow, Abraham
S Mazursky, Benj.
A Mendelsohn, Jan
S Meyer, H. Harold
S Meyer, Joseph
S Meyer, Moses William
S Micelli, Joseph C.
S Milch, Eugene C.
S Miller, Frank
S Miller, Harry
A Muecke, Berthold, Jr.
S Naddelman, Sidney
SS Nagel, Ernest
S Nelson, Louis S.
S Nussbaum, Samuel
S O'Connell, Daniel T.
SS Okun, Sidney
A Ornstein, Reuben
A O'Rourke, Arthur J.
SS Panzarella, Quentin
A Payne, Arthur J.
S Pearlstein, Jacob
A Penn, George
SS Penney, James G.
S Pois, John
S Poselsky, Aaron
SS Prager, William W.
S Reader, Harold
S Ringel, William E.
S Rippstein, John
S Rizzi, Charles
S Robinsohn, Jacob
S Rochow, John B.
A Rosenberg, Max
SS Rosenblum, Walter
S Roth, Harry
S Ruby, Aaron
A Ruffman, Morris
S Sachs, Joseph
A Sakolsky, Hyman L.
A Salamone, Sylvester
S Scheff, Charles Oscar
A Scheuer, Lewis A.
S Schneider, Solomon
S Schnopper, Isidore
S Schure, Joseph
A Schwartz, Louis
S Schwartz, William A.
S Schwartzberg, Isadore F.
S Scheinman, Israel
S Schwitzky, Louis
SS Seidel, Samuel B.
S Serritella, Mariano
SS Shapiro, George
A Signorelli, Eli John
A Signorelli, Thomas
A Silverman, Jacob
SS Siskind, George
SS Slochower, Harry
S Smith, Russell A.
S Soloff, Max
S Solomon, Louis

S Spivak, Benjamin
S Steinberg, Norman
A Sternberg, William N.
S Strassberg, Louis
SS Tannenbaum, Benjamin
SS Thompson, Hardee
SS Tonelson, Archibald N.
A Trilling, Louis R.
S Tropp, Oscar
S Trotsky, Barnet
S Waechter, Walter
S Wascowitz, Benjamin
S Wechsler, Julius
S White, George Edwin
A White, Morris
SS Weinberg, George H.
S Weingrowitz, Samuel
S Weinstein, George J.
S Zuckernick, Isidore

UPPER FRESHMAN CLASS

S Acker, John Theodore
S Adler, Samuel
S Altman, Herman
S Anker, Harry
S Antell, Michael
S Ansholowsky, Joseph
S Arbor, Benjamin
A Atlas, Nicholas
SS Auerbach, Harry
S Baldwin, Raymond C.
S Band, Charles V.
S Barasch, Joseph
S Baskowitz, David N.
A Bass, Samuel
A Bauer, Edwin
S Bayer, Harold
S Becker, Harry
S Bein, Solomon
S Beres, David
A Berkowitz, Max
S Berliner, Harry M.
S Berlucci, John
SS Berson, Israel
S Bleifeld, Sol.
S Block, Morris
A Borodovko, Isidore
S Braude, Ben B.
S Braunstein, Moses L.
S Brenner, Joseph
S Briger, Sigmund S.
SS Brodfeld, Hyman
A Brody, Leon
SS Brower, Nathan
S Burstein, Jacob
S Buschnel, Samuel
S Cantor, Samuel
S Cart, Harry
S Chabon, Irving
S Chafetz, Ascher
S Chaudruc, Juan Emile
S Ciambra, Joseph
S Conklin, Reginald
S Clahr, Albert Abr.
S Cooper, Philip
S Dantzig, Louis
S De Matteis, Arthur
S Denitto, Dominic
S Denker, Peter
S Devine, Evanist J.
S Dondero, John
S Edelstein, David
S Edelstein, Isidore S.
S Ehlin, Isidore
S Eiserson, Leo
SS Elk, Abel
A Epstein, Abraham
S Epstein, Meyer
SS Etra, Max Jacob
S Faber, Samuel
S Factor, David T.
S Farrar, Trevor
S Feigenbaum, Samuel
A Fuld, Stanley H.
S Fine, Irving
A Fine, Sidney
S Francese, Italus H.
A Fried, Edward
S Friedman, Jacob
S Fuentes, Robert W.
S Gade, Herbert
S Galack, David
S Galburt, Samuel
S Garber, Raphael
S Geller, Samuel
S Gewanter, Isidor
S Ginsburg, Alex
SS Ginsburg, Lewis
S Goldberg, Isidore H.
S Goldman, Benjamin
S Goldman, Morris
A Goldman, Simon
A Goldman, Max
SS Goldstein, Robert L.
SS Green, Herman
S Greenberg, Abraham S.
S Greenberg, Alfred
A Greenberg, Louis
SS Greenberg, Milton
S Greenwald, Murray
SS Groff, Isidore
SS Guinane, James P.
S Guttman, Seymour
S Halberstein, Abraham
S Hamburger, Edward
S Harkavy, Joseph
S Heinrich, Albert D.
S Herrman, Henry
S Hertz, Benjamin
S Herzog, Aaron
S Hicks, Kennett M.
S Hochberg, Lew A.
SS Hoffman, Harold
A Horowitz, A. Eugene
S Horowitz, Jacob L.
S Horowitz, Johann
SS Hynes, Charles
S Ingis, Isidore
S Josepher, Sol. C.
S Kahn, Arthur
S Kahn, Gordon
S Kalb, Joseph
S Kane, Douglas
S Kapell, William
S Kantorsky, Milton A.
S Kaufman, Benj.
S Keller, Ira
S Kemes, Oliver D.
S Klauber, Leo
S Kleinstein, Samuel
SS Kosloff, Samuel
S Kutcher, Joseph
S Kutcher, Nathan
S Landsman, Jerome A.
S Lato, Harold
S Levin, Morris
S Levine, Frank
S Levy, Everett R.
SS Lewin, Aaron William
SS Lewittes, Morris
S Licht, Moses
S Liddell, Emmons B.
S Lilling, Marcus
S Liptzin, David M.
S Litowitz, Nathan
S Loewenthal, Maurice
S Lotto, Selig
SS Mafaraci, Concetto
S Mahler, Sidney
SS Maier, Milton
SS Maltz, Meyer
S Mandelbaum, Geo.
S Manfredo, Theodore
S Martocci, Dominick
S Matus, Manuel
A McCarthy, John D.
S McIndoe, J. Everett
S McPherson, Victor
S McVeigh, Francis J.
S Meirowitz, Herman
S Meltzer, Philip Jerome
S Merin, Joseph
S Messing, Louis
S Meyer, Victor
S Milazzo, Peter
S Milikow, David
SS Moore, Sol
S Morgenstern, David
S Morris, Emanuel
S Muller, Nelson J .
SS Muraskin, Israel

S Murphy, Hugh L.
S Nadel, Jack A.
S Newman, Irving Isadore
S Newman, Morris S.
S Novagodsky, Samuel
S Novick, Joel
SS Ohrberg, William A.
S Oxenhorn, William
A Ozarow, Hyman
S Papa, Ludwig G.
S Patent, Jacob
S Patterson, Alex
SS Perlman, Benjamin
S Petix, Joseph M.
SS Phildius, Leo P.
S Picker, Alfred
S Plotkin, Maurice E.
SS Polisuk, Morris
S Prager, Benjamin
S Rabinowitz, Louis
S Rappo, Nathan H.
S Rattner, Nathan
S Ricci, Louis
S Rogatz, Henry
S Roth, Emanuel
S Rothberg, Moses
S Rosenberg, Alex
S Rosenblum, George B.
S Rosenwasser, Harry
S Rothman, John
S Rubaum, Morris
S Rubenstein, Hyman
S Ryan, Christopher M.
S Sachs, Nathan
S Sader, Julius
S Saferstone, Irving
SS Sager, Robert V.
SS Salz, Frank
A Samuelsohn, David
S Sand, Alfred
S Sarnoff, Jack
S Sass, Raymond W.
S Sauber, Irving E.
SS Savanuck, Alex
SS Sherman, Harold
S Schiff, David
S Schlachetzky, Bertram
S Schmidt, Alois
S Schneider, David
SS Schoch, Walter
A Schoenfeld, Edward
S Schwimmer, Jos.
A Seon, Cornelius D.
S Shahn, Benjamin
S Shapiro, William R.
S Shields, Samuel L.
S Sherman, Samuel
S Sholemson, Mandel
A Siegel, Louis I.
S Silberg, Benjamin
S Silverstein, Louis
S Silverstein, Moses
S Simon, Meyer
S Slachefsky, Frank
S Spitz, Morris
SS Stanger, Samuel
S Starr, Louis
S Steffens, Charles T.
S Stein, William
S Steinberg, Joseph
S Steinfeld, Lewis
SS Sternlicht, Bernard
S Sternberg, Harry
S Sternin, Reuben
S Stimmel, Abraham
S Swertlow, Isidore
S Tanenbaum, Samuel
S Tausend, Sidney
S Teitler, Irving W.
SS Temliak, Isidore
S Thomas, M.
S Thompson, Michael
A Tulloh, Joseph A.
SS Vishab, Dicran
A Vogel, Herbert
S Vogel, Sidney
S Von Preysing, Walter
S Wagner, Simon
SS Wallace, Joseph
S Wallach, Bernard
S Warren, George J.
S Weil, Alfred
S Wein, Morris
S Weinstein, Joseph
S White, John J.
S Whiteman, Redvers
S Wiener, Herman
S Weitz, Abraham
S Wilgus, Mordecai
S Williams, John L.
S Winarick, Nathan
S Witsky, Reuben
S Wolf, Norman
S Wolff, Robert Ingersoll
SS Woolff, Max
S Yankowitz, Jacob
S Zelfman, Abraham
S Zuckerman, Isaac

LOWER FRESHMAN CLASS

SS Aaronson, Benjamin
SS Aaronson, Samuel
A Abelson, Harold
S Adelman, Abraham
S Altman, Louis
A Amdursky, Alexander L.
S Antel, Max
S Antopolsky, Wm. A.
S Apter, Abraham
S Aronowitz, Samuel
SS Aronson, Albert H.
S Ashe, Julius
SS Atkins, Louis
S Axell, Joseph
S Bailey, Allan C.
S Bailey, Clarence E. S.
S Balletta, Frank
S Baraff, Charles
S Barasch, Charles
S Baris, Julius
SS Barnett, Herbert
A Barth, J. Harry
A Battaglia, Joseph L.
S Baumoehl, Abraham
S Bausch, Carl
SS Becker, Isidore
S Becker, Samuel
S Bedri, Marcel
A Begun, Isidore
S Belen, Enrique
A Benjamin, Carl
S Berdiga, Joseph H.
S Bergman, Murray
SS Berman, Hyman
SS Berman, Jeremiah J.
S Bernhard, Robert
S Bernhardt, Abraham
SS Bernstein, William
S Bilinsky, Bernard
SS Bishin, Jacob
A Bisulca, John
S Bitter, Harry
S Block, David Edgar
S Blum, Henry
A Blum, Walter C.
SS Bochicchio, Vincent
SS Botwen, Milton
SS Braslowsky, Charles
S Brisman, Benjamin
S Brizzolara, Anthony Alfred
S Brody, Milton
S Brownstein, Jacob
A Bruenn, Milton L.
SS Bugoff, Louis
S Burg, William
S Burke, Edmund
SS Cardona, Ernesto V.
S Carlisle, Richard Wallace
S Carnevale, Alphonse J.
A Casey, Gordon Miller
S Chadabe, Solomon M.
S Chaikelis, Alexander S.
A Chapman, Cornelius B.
S Checker, Wm.
S Chenitz, Nathan
A Chesen, Harry
S Chomsky, Joseph
S Christianson, Theodore

A Cincotti, Edmund
A Clark, Charles J.
S Clemente, Al
SS Cohen, Harry
S Cohen, Irving Isidore
A Cohen, Philip
S Cohen, Sigmund
S Colosi, Natale
S Cooperman, Herbert
A Corbie, Francis Eugene
SS Cowan, Marcy H.
A Cronk, Clifford
S Cunningham, Harry Charles
S Davila, M. Ramon
S Davick, Isadore
S Denis, Harold J.
A De Young, Benjamin S.
A Diamond, William
S Diasio, Jos. S.
S Disanza, Morris
SS Drachman, Theodore
S Dubin, Abraham
S Duchesne, Miguel A.
S Dunbar, Herbert
S Dundes, Maurice L.
A Ehrlich, Irving
S Ehrlich, Isidore
SS Eidenburg, Nathan
S Einhorn, Sidney
S Eisner, Irving
SS Eisner, Morris
S Epstein, Hyman R.
S Epstein, Max
S Epstein, Sydney
S Fader, Bernard
S Fagin, Joseph
S Fanelli, Domenic
A Fayen, Walter
SS Feibusch, Abraham
S Fein, Louis
A Feldstein, Milford
S Fershtman, George
S Feuerlicht, Milton
A Filshinsky, Morris Laurence
S Fine, Marvin
A Finkel, William
S Finkelman, Isidore
A Finkelstein, Benjamin
S Finkelstein, Louis
SS Fischel, Leo
S Fischgrund, Jerome Meyer
A Fishoff, Ephraim
S Fogelman, Benjamin
S Foxman, Hyman
SS Friedman, Charles
S Friedman, Kadish
SS Friedman, Ralph
S Fuchs, Herbert
A Furshtenberg, Joseph
S Geety, Weston Morley
S Gelb, Jacob
S Gelber, Itic
S Geller, Jacob
S George, Philip
A Gerstenfeld, Asher
S Gibbs, Harold
S Gildenberg, Samuel
S Ginandes, George J.
A Ginsberg, Aaron D.
S Ginzberg, Harvey
S Ginzberg, Nahum
S Glassman, George
S Glick, Abraham I.
S Glicksberg, Charles Irving
S Glynn, Hugh F., Jr.
S Godlin, Albert
S Goldberg, Benjamin
A Goldberg, Morris
S Goldberg, William
A Goldman, William
S Gordon, David
A Goodblatt, Morris
SS Goodman, Dezio
A Goreff, Carl
S Gorelikoff, Samuel
S Gottesman, Joseph
S Grabel, Samuel
A Gray, William F.
A Grebanier, Bernard D.
A Greenberg, David
S Greenberg, David A.
S Greenberg, Joseph
S Greenberg, Philip
S Greenberg, Samuel
S Greenwald, Charles
S Griffin, Alfred James
A Gross, George Irving
A Grosselfinger, Edmund
S Grossfeld, Morris
S Grossferstand, Harry
S Grossman, Solomon
S Grundfast, George
S Gruskin, Herman
S Guarino, Anthony
S Guishard, Arthur
A Gushin, Abraham
S Haberfeld, Martin
SS Haiman, Harry
S Hahn, Israel
A Halkin, Abraham
S Halpern, Marion
SS Handelman, Isadore E.
SS Handler, Milton
S Helbig, Walter
A Henry, Charles
S Hershkowitz, Harry N.
S Heyman, Harry
S Heynich, George O.
SS Hirschberger, Emanuel
S Hoffman, Joseph L.
S Hoffman, Robert
S Hoffman, L. Wallace
S Hofrichter, Allen K.
SS Honig, George
S Horney, Leo
SS Hurwitz, Jacob A.
A Israels, Carlos L.
S Jackman, Harold
S Jackson, Joseph
S Jacobowitz, William
A Jacobson, Louis
S Jacobson, Samuel
A Johnston, Joseph
A Jarcho, Saul W.
SS Jay, Leonard
S Josephson, Charles
S Josephson, Hyman
S Judge, Daniel J.
A July, Herbert F.
S Kahn, Bernard S.
SS Kail, Milton
S Kamensky, Samuel
S Kaminsky, Philip
S Kanner, Nathan
S Kantor, Louis
S Karash, Sidney
S Karmin, Joseph
S Karpilow, Samuel
S Kasendorf, David
S Kasnowitz, Abraham
S Kassoy, Israel
S Katz, Benjamin
S Katz, Judah
S Katz, Morris
S Katz, Mortimer Max
SS Katz, Oscar
S Kaufman, Aaron David
A Kavenoff, Jos.
S Ketz, M. Thomas
S Kien, Wm. M.
SS King, Lawrence
A Kirsch, Abraham
S Kissner, Morris
S Klein, David
A Klein, Herbert M.
S Klein, I. Benjamin
S Klein, Rubin
S Klieves, William
S Krakower, Isidore E.
S Kramer, Saul
S Krausz, Henry K.
A Krokow, Harry
S Kronish, Benjamin
S Kukiel, Chauncey
S Kulick, Benjamin D.
SS Kurz, Aaron
S Kushner, Irving
S Kushner, Alazar
S Lactergiser, Abraham

S Lader, Julius
S Lamkay, Hyman
S Lamstein, Jacob
S Langer, Louis
SS Latto, Archie
SS Latzer, Paul
S Lazar, Isaac
SS Leader, Benjamin
A Lease, B. Murray
S Leav, Joseph
S Lebowitz, Harry
S Lefkowitz, Milton
S Leon, Nicholas
S Lerner, Meyer
S Leslie, Linden C.
S Leto, Alfred M.
S Levin, David
S Levine, Edwin R.
S Levine, Harry D.
S Levine, Herman
S Levine, Isaac
S Levine, Max B.
S Levine, Samuel B.
S Levine, Samuel C.
S Levinsky, Maurice
S Levinson, Louis J.
SS Levinson, Samuel
S Levy, Irving J.
S Levy, Milton L.
S Lewis, Irving J.
S Lieber, Allen
S Lieberman, David
S Lieberman, Samuel
S Lifschitz, David
S Lighston, Renold Barclay, Jr.
A Lippman, Jacob
SS Loewenthal, Max Arthur
SS London, David
S Lo Presto, Frank
S McCarty, Stedman
A McCarthy, Thomas M.
A McCreedy, Robert
S McDonald, Alfred
S McKenna, Lawrence
S Machover, Benjamin
SS Maier, J. Alex
S Mandel, Morris
SS Mandell, Sidney
S Marchelos, Stelios
A Marcus, Archibald
S Marcus, Nathaniel W.
S Mariash, Irving
S Markson, Alfred A.
A Martocci, Frank T., Jr.
S Mash, Joseph
SS Mazzochi, William J.
S Meiselman, Louis J.
S Melamed, Samuel
A Mendelowitz, Hyman
S Mesnik, David
S Messeloff, Charles
SS Metz, Irwin
S Meyer, Charles
S Michel, Charles Sol
S Miller, George
S Miller, G. Harry
S Millman, Hyman
S Milsner, Morton R.
S Minevitch, Borah
S Mogilensky, Harry
S Montefiore, Philip Lorenz
A Morris, Richard B.
S Mostow, Harry
A Mund, Jacob
SS Murphy, Edward K.
S Murphy, William R.
S Murray, Irwin L.
S Murray, John
SS Nack, Irving
S Nacovsky, William
A Novgrodsky, Solomon
S Ohrstein, Samuel
S Oleson, Fred
A Oppenheimer, Monroe
A Orange, Samuel J.
S Orshowsky, Nathan
S Ortiz, Emilio
A Osber, Maurice
S Ossinovsky, Jacob
S Osterman, Lewis Anning
S Palma, Michael
S Palmer, Joseph
S Pancamo, Francis A. E.
S Payne, Le Roy
S Pearl, Samuel
S Pech, Irwin
A Pelegrino, John C.
S Perlmutter, Abraham
S Petrie, Kelly T.
SS Pfeiffer, Rudolph
S Pfleiderer, P. Leonard
SS Phillips, Fitzgerald
S Piltch, Max
S Pintov, Israel
S Pistanowitz, Benj.
S Podlipsky, Morris
A Pollack, Samuel H.
S Prensky, Solomon
SS Prodis, Paul
SS Pruslin, William
SS Quat, Jacob
S Rabinowitz, Milton
S Rabinowitz, Moses
S Rafalowsky, Julius
S Rapkin, Reuben
S Reich, Enoch
A Reichgott, Milton
S Reichman, Theodore
SS Reisman, Simon
S Resnick, Israel
S Resnicoff, Solomon
S Rifkin, Isidor
S Rimerman, Sam D.
S Rimmerman, Nathaniel S.
SS Rivlin, Harry N.
S Rittenberg, Leonard M.
A Rodolf, Frank M.
S Regenstein, Wm.
S Roop, Robert W.
SS Rose, Isidore
S Rose, Marten
S Roseman, Ned
A Rosen, Ascher A.
S Rosenbaum, Nathan
S Rosenberg, Edwin
S Rosenberg, Joseph
S Rosenberg, Leon
S Rosenblatt, Harry
SS Rosenblatt, Jacob H.
S Rosenblum, Julius M.
SS Rosenbluth, Nathan
A Rosenbluth, Walter Gordon
S Rosenhack, Isadore
S Rosenkrantz, Morris
S Rosenthal, Leonard
S Rosenowitz, Jacob
A Roth, Michael
S Roth, Nathan
S Rothbart, Sydney
S Rothenberg, Sidney A.
S Rothenberg, Sylvester
S Rothman, Samuel
S Rubin, Samuel
S Rubinow, Raymond
S Rudavsky, David
S Russack, Abraham
A Ryan, Frank A.
S Sachs, Solomon
S Safier, Joseph
S Saiken, Louis
A Salwen, Maurice
S Salmanowitz, Samuel
SS Satin, Joseph
A Saunders, Hubert
S Sax, Solomon
A Schaenen, Bernard
S Schein, Hyman
S Schifter, Leonard
S Schlachter, Rubin
SS Schnurer, Harold J.
S Schneider, Aaron D.
S Schneider, Louis
S Schultz, Isaac
SS Schwartz, Arthur
S Schwartz, Bernard
S Schwartz, Solomon
S Schwartz, William H.
SS Segal, Irving

A Sendler, Murray
S Serbrenik, Reuben J.
S Serwer, Jesse
SS Schachtman, Max
S Shapiro, Abraham
S Shapiro, Aaron
A Shapiro, Benjamin
S Shapiro, Benjamin
S Shapiro, Harry
S Shenit, Harry
S Sheridan, Bernard
S Shpiner, Leonard
SS Siegel, Banjamin
A Siegel, Harry
S Simon, Ludwig
SS Singer, Albert I.
S Singer, Jacob
S Singer, Louis
S Sjogren, Clarence
SS Slobodof, Hyman
A Slotnikoff, William
S Smith, Edgar B.
S Smith, Solomon
SS Sobel, Samuel
S Solomon, Benjamin
SS Some, Samuel J.
S Sonberg, Morris
A Sonenberg, Benjamin
S Spevack, Samuel
S Spielman, I. Irving
S Stankovich, William
S Stark, Leo
S Stein, Alexander
S Steinberg, Max
S Steinbock, Morris
S Steiner, Jos. E.
S Stern, Charles
S Strusinski, Nicholas
S Stumkoff, David
S Swanton, Herbert E.
S Taddeo, Joseph
SS Tamber, George Gustave
S Tannenbaum, Morris
S Tarter, Solomon S.
S Teitelbaum, Maurice L.
S Temkin, Jacob R.
SS Tenenbaum, Samuel
S Tille, Samuel
SS Todes, David
S Tolkowsky, Aaron
S Tolmach, Jesse
SS Topper, Leonard
S Trivilino, Alfred A.
S Tubelsky, Morris
S Turner, William H.
S Unger, Louis
S Valenti, Anthony
S Vann, Samuel
S Varela, Jose
S Velardi, Nicolo C.
S Villegas, Emilio
SS Vincenty, Nestor
S Vladimir, Irwin
A Vogel, Alfred
S Wachtel, Solomon
S Wallach, Robert
S Warshall, Harry
S Waterman, Adolph H., Jr.
SS Weber, Harry
S Weinberg, Arthur A.
S Weingold, Irving
S Weinstein, Leon
SS Weinstein, Max
S Weinstein, Morris
SS Weiser, Max
A Weiss, Alfred L.
S Weiss, Max
A Whynman, Alex J.
S Wigderson, Charles B.
A Wilner, Aaron M.
S Wilson, Harold Westervelt
A Windsor, John D.
S Wishengrad, Hyman
S Wiwak, Max S.
SS Wohnsiedler, Henry
S Wolfsohn, Martin
S Wolk, Abraham
S Wortman, Jacob
S Yager, Jacob
S Yanowsky, Henry
S Yolles, Jacob
A Young, Isidore
S Yuppa, Maurice
S Zamurute, Hyman
S Zaretzki, Louis
S Zaslaw, Alexander
S Ziegelmeyer, George
S Zimmerman, Isidore
A Zimmerman, Louis
S Zizmor, Frank
S Zolinsky, Henry

School of Technology

Day Session

Aronsohn, Morton
Atkins, Harry
Bischof, Gustave J.
Castagnaro, Dominick
Cruse, Creighton
Davis, William
Donargo, Anthony J.
Ehrlich, Jefferson
Friedheim, Louis H.
Fuchs, Samuel
Henry, Maxwell
Himelfarb, Morris
Horowitz, Nathan
Klein, Alexander
Kunz, William N.
Margolius, Naiman
Pabst, William
Plock, Henry
Resnikoff, Louis
Schwartz, David L.
Wolfson, Henry M.
Wren, William P.

Special Students

Day Session

Abrahams, David
Applebaum, Peter
Arnstein, Arnold
Bartelt, George Wm.
Berger, Milton
Bilik, Samuel
Blattman, Aaron M.
Bloom, Benjamin A.
Borock, Samuel S.
Brunke, Albert
Buckvar, Oscar
Buscemi, Joseph F.
Cagney, Harry
Carroll, James A.
Carvajal, Jose A.
Daniels, Solomon
De Courcey, Joseph C.
Delany, Lucius L.
Dressler, David
Edelstein, Emanuel M.
Fairclough, Charles S.

Feinberg, Nathan
Friedman, George
Forman, Maurice
Geller, Aaron
Grelick, David
Gruskin, Isidore
Helm, Arrington Sylocalis
Intiso, Dominic
Jackson, Luther Porter
Kayan, Carl F.
Kivowitz, Meyer
Langer, Meyer
Lilienbloom, Frank
London, Jacob
McCoy, Cecil Aubrey
McDermott, Frank
Manalo, Vincente G.
Matthews, Edward J.
Mazurkiewiez, Ladislaus
Milone, Dominic E.
Nachmani, Ammihud
O'Donnell, Ellsworth
Paul, Louis
Picheny, Bernard
Ravidowitz, Jacob
Reiner, Leon A.
Robinson, Wm. A.
Rosenberg, Henry
Rubino, Peter
Scardaccione, Matthew
Schub, Pincus
Scovner, Joseph
Sealey, William B.
Slochower, Max
Tartak, Elias
Weinberger, Arthur
Weitzen, Samuel

MATRICULATED STUDENTS IN THE EVENING SESSION

At the Main Buildings

LAS = College of Liberal Arts and Science
Tech. = School of Technology
Bus. = School of Business and Civic Administration

LAS Abeles, Charles
LAS Abrahams, David
LAS Abramowitz, Isadore D.
LAS Acosta, Antonio
LAS Adelman, Sophie
LAS Adelstein, Gertrude L.
LAS Aisenberg, Sarah
LAS Ajam, Mustafa J. H. Bey
LAS Alexander, Prince Wm.
LAS Altman, Celia
Bus Anastassoff, Sreben
LAS Appel, Irwin
LAS April, Samuel C.
LAS Aran, Gilberto B.
LAS Arenson, David
LAS Arnoff, Nachman S.
LAS Aronoff, Jacob N.
LAS Arschin, Samuel
LAS Athanassopoulos, Nicholas P.
LAS Auerbach, Charles
LAS Averbuck, Samuel H.
LAS Axelbank, Pearl (Mrs.)
LAS Axelrad, Sol
LAS Bachrach, David
LAS Backler, Samuel
LAS Bagley, Maurice A.
LAS Baker, Sylvester
LAS Barris, Chester A.
LAS Barshay, Bern
LAS Baum, Jonathan
LAS Baum, Owen H.
LAS Benus, Abraham
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LAS Berliner, Edward A.
LAS Bernat, Juliette M.
LAS Bernfeld, Fannie
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Bus Blair, Goldie
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LAS Block, Louis
LAS Block, Ruth
LAS Bodey, Elizabeth May
LAS Botwin, Nathan M.
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LAS Brande, Sophie
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LAS Budinoff, Sylvia M.
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Tech Cadisch, Gordon F.
LAS Cammitz, Helen
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Tech Chasanoff, Eph.
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LAS Connor, Kathleen

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LAS Rothberg, Babette
LAS Rothman, Sarah
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LAS Rubinstein, Rae
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LAS Sicherman, Regina
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LAS Silberg, Benjamin
LAS Silverman, Isadore
LAS Simon, Charles
LAS Simon, Julian
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LAS Sipilesko, Nathaniel
LAS Siragusa, Josephine
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LAS Soibelman, Norman
LAS Solomon, Morris
LAS Sommer, Ira
LAS Spector, Samuel
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LAS Sprung, Florence
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LAS Steinholtz, Samuel
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LAS Strumer, Julius
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LAS Wackerhagen, Alfred
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LAS Wagner, Theodore
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LAS Wallach, Robert
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LAS Weaver, Irma L.
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LAS Weibel, Birdie F.
LAS Weidmann, Rich.
LAS Weill, Ruth E.
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LAS Weinstein, Louis
LAS Weinstein, Lucy
LAS Weinstein, Marcus J.
LAS Weinstein, Solomon Jacob
LAS Weintraub, Hyman
LAS Weintraub, Meyer
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McGuire, James F.
McKay, Donald
McQuade, Peter
Magram, Louis
Magruder, Ott Riddleberger
Mahler, Alexander
Mahler, Joseph
Maida, Josephine
Malbin, William
Marcus, Henry P.
Marici, Vincent C.
Marron, William H.
Maroulis, Anthony
Marx, George, Jr.
May, Alexander
Meisner, Samuel
Meister, Elias
Meltzer, Lewis H.
Mendelowitz, Jos.
Mendelowitz, Solomon
Meyerson, Ellis J.
Miller, Benjamin
Miller, Bernard
Miller, J.
Miller, Jack L.
Miller, Paul K.
Miller, Rachael I.
Mitzner, Samuel B.
Moesch, Elizabeth
Moglin, Samuel
Montz, Sidney
Morowitz, Benjamin
Montrose, Reuben
Moser, William
Moskowitz, Morris
Mulligan, John Martin
Multerer, Charles A.
Nackamnowitz, Louis
Needle, Harry
Nelson, Ben
Neuman, Sydney
Neuwirth, Benjamin
Newman, Benjamin
Newman, Meyer
Nisnewitz, Louis
Nosovitzky, Samuel S.
Nussbaum, Joseph
Odell, Aaron
Offenberg, Benjamin
Oliansky, Irving
Olidort, Joseph
Oliver, Israel
Ollendorf, Arnold O.
Oshinsky, Clarence
Panish, Herman
Panzarella, Quentin
Pasachoff, Flora
Passman, Martin H.
Paul, Samuel W.
Pear, Irving
Pearlman, Harry
Pech, Irwin P.
Peitchel, Nathan L.
Perangelo, Angelo
Perles, Nathan
Perlinon, Nat.
Perlman, Nat.
Pers, Celia
Peshkin, Jacob
Phillips, S. Ackerman
Pleshette, Norman
Plotkin, Abraham
Polk, Irving
Portnoy, Sophie
Posner, Sara
Potash, Marvin
Pox, Joseph
Pritika, Morris
Putterman, Tillia
Raisman, Isreal
Rappaport, Louis
Rapps, Samuel M.
Rathkamp, Mabel S.
Reich, Anna
Reitmeister, Morris G.

Repchinsky, Samuel
Rera, Antoinette
Resnick, Sol.
Reynolds, Daniel P.
Richman, Mary
Rieger, Jacob
Rieger, Joseph
Riesner, Daniel
Rivin, Moe
Robben, John
Roberman, Joseph
Rockman, Aaron L.
Rocks, Edward A.
Romashefsky, Jacob
Ronald, Wm. Herbert, Jr.
Rosen, Harry
Rosen, Hyman
Rosenbaum, Benjamin
Rosenberg, Hyman D.
Rosenberg, Milton
Rosenberg, Nathan
Rosenblatt, Matilda
Rosenman, Elias Benj.
Rosenthal, Sara
Rosenzweig, Henry
Rosenzweig, Isador A.
Roser, John
Roskin, Harry
Rothberg, Fannie
Rothman, Charles
Rothstein, Nathan
Rothstein, Solomon
Rotter, Morris
Rubin, Abraham,
Rubin, Abraham,
Rubin, Emil
Rubin, Florence
Rubin, Julius
Rubinson, Moses
Rucker, Otto
Ruderfer, Rose
Rudolph, Abraham
Ruth, Isidor
Sahud, Milton
Salsberg, Irving
Saxon, Harry
Scardaccione, Mathew
Schachter, Samuel A.
Schaffo, Frank H.
Schapiro, Arnold H.
Schapiro, Charles
Scheer, Lester
Schein, Anna
Scherago, Jacob
Schick, Lester
Schnee, Abraham A.
Schonfeld, Joseph
Schneider, Harry
Schneiderman, Geo. H.
Schrago, William
Schron, Morris
Schulder, Jacob
Schuster, Louis
Schwartz, Abraham
Schwartz, Alexander
Schwartz, Isadore
Schwartz, Jacob L.
Schwartz, Joseph M.
Schwartz, Sam
Schwartz, William
Sedacca, Albert
Seidenstein, Jacob
Seidenstein, Louis
Seidlitz, Hyman Wm.
Seidman, Isidor Arthur
Seigerman, Morris
Shapiro, Charles
Shapiro, Harry
Shapiro, Harry
Shapiro, Harry P.
Shapiro, Julius U.
Shapiro, Maurice
Shapiro, Morris
Shatsky, Morris
Shear, Louis
Shiffman, Jacob
Shure, Saul D.
Shyatt, Louis Stanley
Sieven, Samuel
Signorelli, Aloysius T.
Sikowitz, Isidore
Silber, Yetta
Silbermintz, Samuel
Silbert, Herman C.
Silig, Michael
Silver, Abraham
Silverman, Bernard
Silverman, Samuel L.
Silverstein, Abraham
Simon, Joseph
Sims, George P.
Singer, Lillian
Sisenwein, William
Skal, Raphael Joseph
Skalka, Celia
Skidelsky, Hyman
Smith, Charles
Smolowitz, Ethel
Snyder, Benjamin
Sobel, Julius
Socolof, David
Solovay, Jacob
Spector, Julius
Sperling, Benjamin
Spindle, Pincus
Spiner, Henry H.
Springer, Harry A.
Stander, David H.
Stark, Abraham B.
Stein, Morris M.
Steinberg, Ben
Steinberg, Max
Steinberg, William
Stern, David
Steyn, Harry
Streep, Anita
Stuckelman, Max
Stuckgold, Samuel
Sturman, Louis
Sunshine, Ella
Suskin, Nathan
Sussfeld, George
Sussman, Martin
Sussman, Joseph
Swertlow, Gabriel
Symon, Sarah R.
Tarlow, David
Tascondi, Hyman I.
Teich, Maurice
Tepper, Rebecca
Thousenfriend, J. R.
Tobias, Paul
Toole, William C.
Touriel, Archer
Trace, William
Turits, Leonard
Unschweif, Isidore M.
Varnuska, Emil J.
Vignola, Louis
Viscardi, Anthony F.
Voigt, Fred J.
Waldman, Meyer
Walsh, Joseph A.
Warkow, Boris J.
Warmflash, Joseph
Warshowsky, Abraham
Wasserman, Morris J.
Weinberg, Charles
Wasserman, Herman L.
Weinberger, Emanuel
Weinberger, Harry
Weinstein, Abraham
Weinstein, Harry
Weinstein, Morris
Weinstein, Nathan
Weinstein, Samuel
Weinstein, Sarah
Weinstock, Nathan
Weintraub, Isaac
Weinzweig, Jacob
Weisbart, Jos.
Weisel, Samuel
Weiser, Max L.
Weiss, Bernard
Weissinger, Esther
Weissman, Mollie
Weitz, Henry
Werden, Jesse
White, Kenneth B.
Wildstein, Mitchel
Willner, Julius H.
Wilt, Samuel J.
Winkler, Joseph

Wiwak, Max S.
Wolf, Joseph B.
Wolfensohn, Samuel
Wolinsky, Moses
Wolosoff, Abraham
Wood, Vance
Yamin, Samuel
Yaswen, Henry
Youngwood, Joseph
Zeiger, Samuel
Zeinlock, Abraham
Zeitlin, Marc
Zellman, Sidney
Ziony, Raphael
Zlot, Maurice
Zlotolou, Esther
Zucker, Abraham
Zuckerbrot, Herman
Zuckerman, Max H.
Zudeck, Morris

At the Brooklyn Branch

LAS Aaronson, Mildred
LAS Abramo, Dominick
LAS Ageloff, Lillian E.
LAS Albin, Etta
LAS Alexander, Hazel
LAS Alkow, Jacob M.
LAS Allison, Bernard
Bus Altshuler, Miriam
LAS Apelzin, Rosalie
Bus Applebaum, Jacob
Bus Appleman, Morris
LAS Aronoff, Miriam
LAS Aronstomp, Rosalie
LAS Axelrod, Sol
LAS Ayewais, Matilda
Tech Balatow, Low J.
LAS Balkind, Eli
Bus Baum, Edward L.
LAS Bedell, Ralph E.
LAS Begman, Lena I.
LAS Behr, Isidore
LAS Belsh, Frieda
Bus Beman, Hyman
LAS Bender, Ida H.
LAS Bender, Henry P.
LAS Berg, Sarah
Bus Berger, Ed.
LAS Berkowitz, Irene
Bus Bernard, Frank
LAS Bernhard, Emma
LAS Berkowitz, Max
LAS Bernstein, Rae
Tech Berman, Florence
LAS Bikoff, Jonas
LAS Birnbaum, Lillian
LAS Black, Philip
LAS Blank, Cecelia
Tech Block, Ephraim
LAS Bloomberg, Morris
LAS Blumberg, Celia
LAS Blumberg, Dora
LAS Boll, Arthur
LAS Bookman, Sonia S.
Bus Boyle, Francis
LAS Boxer, William J.
LAS Brady, Catherine M.
LAS Brands, Thomas
LAS Brault, Helen A.
LAS Brody, Rebecca
LAS Brook, Benjamin
LAS Brown, Arthur
LAS Brown, Jacob
LAS Brown, Paul
LAS Brimke, Albert
LAS Bunzelman, Celia
LAS Bryant, Marie
Bus Budenoff, Leon
Bus Callenden, Holly
LAS Cantor, Frances
LAS Caparell, Joseph
LAS Cappe, Ethyle
LAS Carcatina, M. J.
LAS Chernock, Marion
LAS Claffy, Mary J.
Tech Coble, Walter
Bus Cohen, Cecil
LAS Cohen, Frances
LAS Cohen, Louis
Tech Cohen, Moe
LAS Cohn, Theresa
Bus Conarck, Albert M.
LAS Conovitz, Kate
LAS Conway, J. A.
LAS Copleman, Joseph
LAS Coyle, Eugene F.
LAS Crystal, Rose
LAS Cummings, E. Mabel
LAS Davis, Milton
LAS Davick, Isidore
LAS Dichter, Celia
Bus Dieber, Goldie
LAS Domsky, Wolf
LAS Driscoll, John
Bus Dworken, Jos.
LAS Ehrlich, Louis
LAS Ehrlich, Henry
LAS Eiten, Irving
LAS Ellenbogen, Mabel
LAS Ellis, Raymond
LAS Engle, Leon
LAS Engel, Siegfried
LAS Epstein, Abraham
LAS Epstein, Kate
LAS Epstein, Freda
LAS Ernst, Melita
LAS Etkowitz, Clara
LAS Famland, Rebecca
LAS Fermaglech, Harry
LAS Feinson, Samuel
LAS Finch, Elsie
LAS Fisch, Estelle
LAS Fisher, Esther N.
YAS Fitzgerald, Margare D.
LAS Flaimenhaft, Alex
LAS Fliegel, Elsie
LAS Fliegelman, Pauline
LAS Forman, Charles
LAS Foster, Kathleen A.
LAS Frank, Joseph
Bus Freed, Gustave
Tech Freedman, Ella
LAS Freedman, Mannie
LAS Fried, Esther
LAS Friedman, Edith
LAS Friedman, Elsie
LAS Friedman, Ida L.
LAS Friedman, Harry
LAS Friedman, Mildred
Bus Friedman, Saul
LAS Fruhan, William E.
LAS Fuchs, Stephanie
LAS Gabrilowitz, Bertha
LAS Gamso, Beatrice
Tech Gannon, Edmund
LAS Gennes, Louis
LAS Glaser, Theresa
LAS Glassgold, Adolph
LAS Goelz, Edna
LAS Goldberg, Rose
Bus Goldman, Theodore
LAS Goldschlager, France
LAS Goldsmith, Ruth L.
LAS Goldstein, Ethel
LAS Goodman, Hattie
LAS Gordon, Pearl
LAS Gordy, Louise
Tech Gottesman, Minnie
Bus Gottleib, David
LAS Gravey, Lena
LAS Grayer, Max
LAS Greenfield, Edna
LAS Griffith, Edith
LAS Gross, Miriam
LAS Grover, Eva
LAS Gundel, Wilhelminis
LAS Halperin, Henry

LAS Halperin, Henry
LAS Halperin, Morris
LAS Handel, Maurice
LAS Harris, Dorothy H.
Bus Harris, Freda
LAS Harrison, Anna B.
LAS Harrison, Bessie
LAS Heitner, Sara
Bus Heisler, Daniel
LAS Held, Mildred
Bus Heller, Henry
LAS Henry, Ethel M.
LAS Herriman, Lillian
LAS Higgins, Mary F.
Bus Hillman, Samuel
Bus Hirshkowitz, Wm.
LAS Hochman, Reuben
LAS Hoerig, Elsie
LAS Hoffman, Anna
Bus Hoffman, Edward
Bus Hoffman, Jerome
LAS Hollander, Anna
LAS Horowitz, Anna
LAS Howell, C. Garfield
LAS Hughes, Rose
LAS Hull, Mae P.
Bus Hulbraun, Solomon
LAS Isaacson, Abraham C.
LAS Kalina, Rose
LAS Kass, Mary I.
LAS Kabrisky, Abraham
LAS Kalkin, Moses
LAS Kalina, Rose
LAS Katz, Blanche
LAS Katz, Laura L.
LAS Katz, Nina
LAS Katz, Pauline
Bus Katzher, Samuel
Bus Kaufman, H. E.
LAS Keckley, Allyn
LAS Kelley, Martin J.
LAS Keough, Regina
LAS Keshen, Max R.
LAS Kessler, Edith
LAS Kerman, Ida
Tech Kivel, Morris
Bus Klaiber, Margaret
LAS Kleinman, Zelda
LAS Knabenhoff, Morris
LAS Knabenhoff, Rebecca
LAS Knapp, Arthur
Bus Knaus, Jack
LAS Kofflen, Pauline
LAS Koppleman, Hyman
LAS Kosuskin, Lena
LAS Kraus, Beatrice
LAS Kris, Joseph H.
Bus Kuttin, Sydney
LAS Labenow, Max
LAS L'Allemand, Marie
LAS Landes, Sidney
LAS Landesman, Isidor
LAS Launer, Harry B.
Bus Lapidus, Sol. H.
Bus Lasser, Benj.
Bus Law, Alfred
LAS Lawrence, Rosemary
LAS Laxer, Jane
LAS Leavitt, Albert M.
LAS Lebaw, Victor
LAS Leder, Frieda
LAS Lehman, Mary
Bus Lesser, Jos.
LAS Levien, Anne
LAS Levine, Arthur
LAS Levine, Esther
LAS Levin, Rae
LAS Levine, Sarah
Bus Levy, Harold
LAS Levy, Dorothy
LAS Levy, Isadore
LAS Levy, Rose
Bus Lewis, Herman
LAS Lewry, Marion
Bus Liebowitz, Martin
LAS Lifshitz, Lillian
LAS Lifshitz, Samuel
LAS Liftchild, Doris
Bus Lipschutz, Alexander
LAS Lipsig, Harry
LAS Litowitz, Lottie
LAS Litowsky, Mary
Bus Lockowitz, David
LAS London, Mannie
Tech Long, Helen M.
LAS Loretz, Frances
LAS Lowenkron, Henry
LAS Luckman, Mildred
LAS Lundanabum, Esther
LAS Lunz, John
LAS Lupton, Olive M.
LAS McCabe, Mary
LAS McDorman, Herbert G.
LAS McFaul, Gregory B.
LAS McGrover, Albert S.
LAS McLoughlin, Jos. M.
LAS McManus, James W.
LAS Maloff, Milton
LAS Maloney, Marie
Tech Manfredo, Ernest J.
LAS Marcus, Harry
LAS Mark, Moisser
Bus Marone, Clement A.
LAS Mathewson, Lydia
LAS Matschke, Griffith
LAS Matthry, Alice A.
LAS Meegan, Angela
LAS Melair, Victoria
LAS Meltz, Minnie J.
LAS Meltzer, Sophie
LAS Menendez, Elena M.
LAS Messerle, Amelia
LAS Meyer, Marjorie
LAS Michel, H. Ronald
LAS Middleton, Naomi
Bus Miller, Harry
LAS Miller, Martha
LAS Moseley, Herbert
LAS Mozer, Max
LAS Murphy, Mary E.
Bus Muller, Alexander
Bus Munves, Sara
Bus Murphy, Wm.
LAS Myaskofsky, Anna
LAS Natelson, Herman
LAS Neifeld, Harold
Bus Nelson, Marcus
LAS Nolan, Madeline
Tech Norton, Roger S.
Tech Nosovitsky, Sam
LAS Noyes, Samuel A.
LAS O'Neill, Alice
LAS Oppido, Gaetana K.
LAS Oransky, Louis J.
LAS O'Toole, Charles Carroll
LAS Overton, Willis
LAS Paisner, Anna
LAS Palmer, Lillian S.
LAS Parmas, Theresa
Bus Passoff, Harry A.
Bus Pastor, Fanny
LAS Perlmutter, Abraham
LAS Pheney, Mary
LAS Pineus, Rachel
LAS Pines, Anna H.
LAS Plattes, Florence C.
LAS Plunkett, Loretta
LAS Pomerance, Isidore
LAS Pomerantz, Abraham
LAS Porterfield, M. Frances
Tech Printy, Lavinia
LAS Provost, Irene L.
Bus Putterman, Harry
LAS Raabin, Deborah
Bus Rabinowitz, Max
LAS Radtke, Erna
LAS Radezky, Benj.
LAS Rehfeldt, Cath.
LAS Rehfeldt, Sarah
LAS Reich, Julius
LAS Reichel, Ida
LAS Reiss, Isidor
LAS Rendell, Harriet E.
LAS Resnick, Samuel
LAS Ress, Cecilia
LAS Reynolds, Gerard A.
LAS Roodman, Tillie

LAS Rose, Harry
LAS Rosen, Hyman
LAS Rosenbaum, Flora
LAS Rosenberg, Fred C.
LAS Rosenblum, Anna
Bus Rosenblum, Howard
Bus Rosenthal, Miriam
LAS Rosenthal, Miriam
LAS Rosenthal, Ruth
LAS Rosenzweig, Harry
Tech Rottkowsky, Chas.
LAS Rubee, Anna
LAS Rubin, Seth
LAS Rubinstein, Miriam
LAS Ruhman, Jacob G.
LAS Sadowsky, Beatrice
LAS Salwen, Gertrude
Bus Sauerbrunn, Loretta
LAS Schaefer, Leo J.
LAS Schatz, Rae
LAS Schavelson, Katherine
LAS Scherr, Sadie
LAS Schierenberg, Jacobine F.
LAS Schiff, Frances
Bus Schlang, Jerome
LAS Schlupsky, Sadie
LAS Schnertzler, Celia
LAS Schnatz, Adele
LAS Schnatz, Ruth E.
LAS Schneidkrant, Anna
LAS Schulman, Martha
LAS Schultz, Belle
LAS Schuntz, Joseph
LAS Schure, Joseph
LAS Schuster, Annette
LAS Schuster, Samuel
LAS Seigerman, Henrietta
LAS Serramoglia, Marie
LAS Seskis, Irving
LAS Shaffman, Max
LAS Shakin, Nat
LAS Shapiro, Arnold
LAS Shapiro, George
LAS Shapiro, Isidore
LAS Shapiro, Sydney
LAS Shay, Percy A.
Bus Sherrer, Roland
LAS Shepperson, May
LAS Siegel, Jennie
LAS Siegel, Meyer
LAS Silverman, Abraham
Bus Silversmith, Julius
LAS Silverstein, Nina
LAS Simons, Susie
LAS Slater, Joseph M.
LAS Slatus, Sarah
LAS Slutsky, Ruth B.
LAS Smith, Edward T.
Bus Smith, Harold V.
LAS Smith, Geo. V.
LAS Smith, Martha J.
LAS Smith, Mary E.
LAS Solomon, Bella
Bus Solomon, Jacob
LAS Solomon, Freda
LAS Solotaroff, Rebecca
Bus Solwen, Gertrude
LAS Sorolso, Samuel
LAS Spain, Stella
LAS Spatz, Benj.
LAS Spector, Frances
LAS Stack, Max
LAS Stegloff, Isidor
LAS Steinberg, Emma
LAS Stephen, Wm. F.
LAS Stern, Chas.
LAS Stern, Rebecca
LAS Sternin, Samuel
LAS Stivelman, Jos. P.
Bus Stoller, Philip
LAS Strodler, Morris
LAS Surowitz, Esther
LAS Sussman, Celia
Bus Sussman, Saul M.
Tech Talisnick, Jennie
Tech Taylor, Adelbert L.
Tech Taylor, W. Renwick
Bus Teommy, George
LAS Tobias, Fannie
LAS Tolkowsky, Aaron
LAS Trages, Mary
Bus Traver, Marion
Bus Trotsky, Abraham
LAS Trynz, Esther J.
LAS Trynz, Frances
Bus Tunis, Ida
LAS Tutnauer, Nathan
LAS Uhrbach, Arthur
Bus Usoskin, Rose
LAS Vischofsky, Jeannette
LAS Wachtel, Anna
LAS Wagner, Frances
LAS Waldbaum, Marks
Tech Waldbaum, Marks
LAS Waldeck, Arthur
LAS Watson, Gertrude A.
LAS Weber, Louis M.
LAS Wedtesweiler, Henry
LAS Weinberg, Alice
LAS Weinman, Lena
Bus Weinman, Lena
Bus Weintraub, Harry
LAS Weiser, Emma L.
Bus Weiss, Louis
LAS Weiss, Joseph
LAS Weiss, Libbie
LAS Weiss, Louis
LAS Werbin, Ruth I.
LAS Westheimer, Irene E.
Bus Whizin, Chas.
LAS Wieselthier, Benj.
LAS Wolfowitch, Celia
LAS Woodyard, Horace
LAS Zeidenshner, Jacob
LAS Zelekowsky, Dora
LAS Ziony, Mariam
LAS Zlotnick, Yetta

At the Municipal Building

Enrolled in the School of Business and Civic Administration.

Fisher, Arlyne
Ginsberg, Max
Handy, J. Lloyd
Kransdorf, Solomon
Kransoff, Samuel
Lintner, Julia R.
Scalko, Joseph J.
Wood, Vance

SUMMARY

For the Term Ending in January, 1921.

Matriculated students:

Day Session (Main Buildings):

The College of Liberal Arts and Science:

	Arts	Science	Social Science	Total		
Upper Seniors	35	33	11	79		
Lower Seniors	30	61	22	113		
Upper Juniors	27	51	22	100		
Lower Juniors	32	92	38	162		
Upper Sophomores	34	123	25	182		
Lower Sophomores	34	136	30	200		
Upper Freshmen	22	208	40	270		
Lower Freshmen	82	362	81	525		
	296	1,066	269	1,631		
The School of Technology				22		
Special Students				58		
					1,711	
Evening Session:						
Main Buildings				737		
Commerce Building				641		
Brooklyn Branch				477		
Municipal Building				8		
					1,863	
Total, Matriculated Students						3,574
Non-Matriculated Students (Evening Session):						
Main Buildings				1,700		
Commerce Building				2,192		
Brooklyn Branch				244		
Municipal Building				396		
Total, Non-Matriculated Students						4,532
Students in the Extension Courses						4,437
Students in the Preparatory High School						1,228
*Aggregate Total						13,771

* For students in the Day Session of the College of Liberal Arts and Science during the term ending in June, 1920, but not the present term, see the following pages. For students registered in the Summer Session of 1920, see page 210.

STUDENTS OF THE DAY SESSION

During the Term ending in June, 1920, but not during the Present Term.

College of Liberal Arts and Science:

Upper Seniors	116
Lower Seniors	38
Upper Juniors	26
Lower Juniors	35
Upper Sophomores	40
Lower Sophomores	83
Upper Freshmen	144
Lower Freshmen	190
School of Technology	14
Special Students	55
	741

College of Liberal Arts and Science

UPPER SENIOR CLASS

SS Albert, Henry
S Appleby, Noel
S Arnstein, Arnold
S Aronchick, George C.
S Ashe, Benjamin
A Ball, William
A Bartelt, George Wm.
A Beckenstein, Maruice
S Berkowitz, Max
A Beuerman, George K.
A Bleibtrey, John E.
A Braverman, Louis
S Broggi, Dante E.
A Canonico, Joseph J.
A Cohen, Edward L.
A Cohen, Harry
S Cohen, Hyman J.
S Cohen, Paul Wm.
SS Cottin, Jacob
A Dixon, Robert S.
A Drachsler, Leo
A Edelstein, Harry
S Eisenstat, Samuel
A Feuerstein, Abraham
A Finkelstein, Joseph
A Finn, John F. X.
S Fox, George S.
A Friedman, George
A Friedman, Hyman
SS Furman, Aaron
A Garlock, Edward
A Gatof, Herbert S.
S Gelbstein, Nathan J.
S Goldberg, Abraham J.
S Goldin, Harry
A Goldstein, David L.
S Goldstein, Samuel
S Grelick, David
S Gross, Harold
S Grunen, Max
S Guest, Leslie P.
S Harsany, Chas. J.
SS Hofmann, Max
A Holmes, Frederick O.
A Hyman, Joseph
SS Iserman, Maurice
S Israel, Martin
A Jackson, Wesley S.
S Jungerman, John J.
S Kaplan, Julius
A Katzenellenbogen, Nathan
A Klein, David
A Korn, Charles
A Krassner, Peter
A Kresch, Maxwell
SS Kuntz, Abraham
S Langer, Meyer
A Lazinsky, Sam B.
A Levy, Benjamin
S Levy, Irwin
S Lilienbloom, Frank
A Linder, Leo J.
S Lipnick, Arthur
A Lipschitz, Max
S Lipton, Irving I.
A Macleod, William R.
A Marcus, Joseph
A Meltzer, David
A Miron, Fred M.
A Murray, John J.
S Nelson, Solomon
SS Nicholls, Frank
A Pause, George D.
A Polinger, Elliot
A Polk, Irving
A Poris, Max
S Pratt, James K. W.
A Principe, Amadeo
A Ragusa, Joseph
SS Rapps, Samuel
SS Richter, Herman L.
S Rodoskowitz, Gabriel
A Rosenblum, Abr. J.
A Rosenblum, Morris
S Rosenheck, Joseph
A Roskin, Hyman
A Saetz, Morris E.
S Scheiner, Frank S.
A Schimel, Adolph
A Schwartz, David J.
A Schwartzfarb, Morris B.
S Shaftan, Leonard
A Shapiro, Benjamin J.
S Sherry, Joseph
A Silver, Philip
SS Silverstein, Louis
S Sonkin, Simon

S Spiritis, Harry
S Springer, Jacob
S Steuber, Albert H.
A Sulman, Leo
S Supnick, Louis
S Taft, Arthur
SS Traub, Solomon
A Trosten, David
A Uhl, Alexander H.
A Waldbaum, Isaac
S Wallerstein, Abraham
A Weinberger, Arthur
S Weissberger, Stephen
S Wendell, Benjamin
S Williams, George
A Yaconetti, Anthony
S Zlot, Morris
A Zuckerbrot, Herman
A Zuckerman, George

LOWER SENIOR CLASS

SS Abramowitz, Nathan
A Bernstein, Samuel L.
A Bloch, Emanuel
SS Brophy, Daniel F.
S Bruckner, Robt. E.
S Diamond, Joseph L.
S Diement, Marcus
S Feinberg, Harry
S Feldman, Frederick
S Freehill, James E.
S Freeman, Samuel R.
S Friedman, David D.
S Friedman, Jacob
S Friedman, Herbert
S Goldberg, Ab. I.
S Goldstein, Leo
S Grayzel, Harold G.
SS Green, Joseph J.
S Greenfield, Maurice
A Greiff, Morris L.
A Grossman, Bernard
SS Gussow, Mortimer C.
A Jaffe, William C.
A Kantor, Isidore
A Katzen, Joseph
A Kessock, Hyman
S Levine, Isidore
A Palestine, Ira J.
S Polakoff, Barnett P.
S Rosenfeld, Hyman
S Sachs, Wilbert
S Schweizer, Albert C.
SS Seidenstein, Jacob
S Taub, Jacob
A Tepper, Jacob
S Wolfe, Max
S Wong, Din
S Youmans, W. Cory

UPPER JUNIOR CLASS

A Arnoff, Nachman S.
SS Bernhardt, Maurice
SS Bossenberger, Walter Henry
SS Brinn, Harold C.
S Eisenberg, David
A Golub, Abraham
S Gonitzer, Herman Morris
S Goodman, Morris
S Gothelf, Adolph
SS Jacobs, Julius M.
S Kramer, Israel
SS Lichtschein, Harry G.
A McKenna, Joseph V.
S Moskowitz, Isidore
S Motto, William
SS Pearlman, David W.
S Poliakoff, Solomon
S Pollack, Michael
A Reichler, Isadore
A Safferson, Louis S.
S Scherma, Angelo Salvatore
S Schneider, Nathan A.
A Shannon, William T., Jr.
S Springer, Joseph Arthur
S Weingarten, Michael
S Yaswen, Joseph

LOWER JUNIOR CLASS

S Alstodt, Berl S.
S Cadmus, Bradford
S Campus, Joseh L.
S Chodack, Perez
SS Cottin, Edward
S Diener, Morris E.
S Drew, John Jerome
SS Frankel, Nathan
S Friedman, Bernard
A Gold, Max M.
SS Goldenberg, William
S Goldfarb, Nathan A.
A Greenberg, Simon
S Kirsch, Sol
S Klebanoff, Isaac
S Kleinkopf, Peter
S La Mantia, Salvador
SS Mannino, Vincent
S Metz, Herman
S Radwin, Leo
S Rosenfeld, Harry J.
S Rosier, Alfred
S Sand, Maurice
S Schildkret, Harry
S Schlecker, Abraham
S Schoen, Isadore
S Shapiro, Harry
S Siegel, Allan
S Silverstein, Max H.
A Southworth, Philip M.
S Tomberg, Benjamin
A Ungar, Sidney
S Waks, William
S Yarvin, Isidore
S Young, Irving H.

UPPER SOPHOMORE CLASS

SS Amstell, Leon
S Brown, David
S Caeti, Vito
S Caruso, Joseph
S Casioppo, Lawrence
A Cohen, Benjamin
S Cohen, Harry J.
SS Cohen, Sydney
S Curtin, Lawrence
S Davidoff, David
S Diamond, Louis
S Dicker, Reuben M.
S Domsky, Wolf J.
S Epstein, Herman
SS Frank, William
S Galardi, John
S Goldberg, Nathan
S Goldstein, Bernard
SS Horowitz, Joseph
S Jablonski, John
S Jacobs, Albert
S Katzen, Perry
S Kroffsky, Max
S Malagrino, Philip Jos. P.
S Mandelblatt, Morris
S Meighan, Burton C., Jr.
A Nass, Isaac
SS Prime, John Henry
A Rolnick, David
S Rosen, Max William
SS Sacher, Harold
S Schatz, Cecil B.
S Seltzer, Abraham
SS Schwartzberg, Benjamin William
S Strulowitz, Morris George
S Tannenbaum, Louis
S Weigel, Robert Carl
S Wetjen, Edward Leroy
A Windhorst, John H.
S Wood, Vance

LOWER SOPHOMORE CLASS

S Abruzzo, Joseph S.
S Agoos, Israel
S Bacharach, Jesse R.
S Barshay, Bernard
S Bernstein, Louis
S Billing, Alan L.
A Bisbano, John
S Blutstein, Sol
S Bonfield, Morris
A Brady, Vincent John Joseph
S Bruenn, Ralph Emil
S Buffone, Ernest
S Cooper, Solomon
S Corn, Harold
S Dubin, Hyman
S Duncan, Henry Benjamin
S Elgar, Quested L.
S Essen, Benjamin
S Feinberg, David
S Feinson, Samuel H.
SS Finkelstein, Matthew Irving
SS Fisher, Elliott Edson
S Friedman, Asa Ben
S Gastman, Harry
S Geiger, William
S Glass, Carl
S Goebel, Martin
S Goldfarb, George
A Goldstein, Philip
S Greenfield, David
S Grossman, Reginald
S Guttman, Nathan Theodore
SS Haas, Isaac
S Herman, Harry L.
S Herold, Mandel
SS Holt, Walter William
S Honigman, Elkano R.
A Hyman, William
S Jacobs, Lester A.
S Kagan, Maurice
S Kaplan, Abram
SS Kertes, John
S Kirschenbaum, Gabriel
S Kirschner, Isidore
S Kleinfeld, Victor M.
S Klose, Francis Joseph
S Kramer, Chaim
S La Noce, Henry
S Lardaro, Herman
SS Lebovitz, Leo Bernard
S Lehrman, Louis
S Lichtman, Samuel
S Mann, Murray
SS Marschall, Xavier
A Mauro, Joseph A.
S Meltzer, Samuel
S Messer, William
S Monto, Jacob
A Norman, Paul J.
S Nunez, Edgar Owen
S Oringel, Benjamin
S Perlman, Louis
S Pinkowitz, Jacob
SS Posner, Max
S Posner, Oscar
A Rabinowitz, Moses
S Rizzi, James V.
S Salzman, Carl
S Sandry, Solomon
S Satriano, Humbert John
S Sava, Anthony F.
S Schambaum, Benj. R.
A Schisgall, Oscar
S Shapiro, Samuel David
S Silverman, Irving A.
S Sonkin, Charles
S Steinberg, Aaron
S Taylor, St. Elmo E.
S Thorn, Sanford J.
SS Trossman, Henry
A Turitz, George
S Vitulli, Peter
A Weinstein, Solomon

UPPER FRESHMAN CLASS

S Agris, Jacob
S Apostolakos, Nicholas
S Arenson, David
S Aronson, George
SS Auerbach, Abram Martin
S Auerbach, Philip
SS Ballin, Samuel R.
S Benjamin, Emanuel
S Bessen, Max
SS Bodenstein, Meyer
S Bluhm, Isidore
S Bracco, Donato
S Brody, Alexander
S Brotofsky, Louis Meyer
S Brownstein, Harry
S Cagney, Edward
SS Chavin, Simon
A Chipkin, Benjamin
S Chodolofsky, Mitchel
SS Ciner, Irwin
S Cohen, Benjamin
S Cohen, Samuel
S Correale, William H.
S Daniels, Louis
SS Diamond, Robert
S Dicker, Isadore
S Domash, Hyman
S Eckman, Leo
S Edelberg, Louis
S Elfenbeing, Samuel
S Fass, Samuel P. L.
S Feldstein, Max
S Finkelstein, Julius
S Forster, Joseph
S Frankel, Sidney Ludwig
SS Friedman, Frank
SS Friedman, Isidor
S Germain, Isidore Aaron
S Gewirtz, Solomon
S Ginsberg, Sidney
SS Glaberman, Philip
S Goldberg, Isidore
S Goldberg, Simon Noah
A Goldberg, Joseph
S Gordon, David
S Greenwald, Milton
S Grieco, Joseph
S Gumina, George B.
S Gustafson, Odin
SS Harris, Harold
SS Harris, William Theodore
A Heilbraun, Solomon
S Heitsmith, William J.
S Hinden, Hyman N.
S Hodkin, Samuel Jerry
A Holland, William I.
S Hunter, William E.
S Isaacs, Herman N.
S Isaacs, Meyer
S Jones, Hilma Eugene
S Jurkowitz, Martin
S Kagel, Reuben
SS Kaplan, Irving H.
S Kessler, Arthur
SS Kimmel, Benjamin
SS Kleban, Myron J.
S Klein, Harry S.
S Klein, Louis
S Kommel, Myron
S Korsunsky, Emanuel
S Kuner, Samuel
S Kupperman, Harry
S Labovitz, Abraham I.
S Land, Richard I.
S Landau, Jacob
S Lazowsky, M. Sol
S Lebish, Benjamin Harrison
S Lerner, George Louis
SS Lewis, Samuel
S Lifshitz, Magnus
S Lifschitz, Samuel
S Lipschitz, Jacob
SS Louria, Emanuel
A Malkan, Harold
S Markel, Albert
S McCoy, Fleetwood M.

SS McGee, James Joseph
S Meltzer, Maxwell
S Mermelstein, Morris B.
S Meyer, Alvin E.
S Michnick, Louis
S Morrissey, William J.
S Mundree, Louis
S Nicargi, Lawrence
S Opin, Edward
S Padula, Joseph F.
S Pearlman, Max
SS Perkel, Morris
A Powsner, Solomon
S Perlstein, Phillip J.
S Rabinowitz, Max
S Radezky, Benj. Franklin
S Raphael, Louis J.
S Rauch, Louis
S Riccardi, Peter
SS Romanoff, H. Herbert
S Rosenblatt, Louis
SS Rosenthal, Monroe
SS Rothenberg, Max L.
S Rothstein, Herbert George
S Rubinow, George
S Rubinstein, Edward
S Sasonsky, Morris
S Scheer, Harry
S Shamroy, Leon
SS Schwarzberg, Harold
S Siegartel, Morris
A Siegel, Norman
A Signer, Isadore
A Signorile, Joseph V.
S Sileno, Joseph
S Singer, Morris
S Sirota, Samuel Louis
S Smith, Nathan
S Stein, Israel
S Steinberg, Max
S Suib, David
S Sussman, Harry H.
S Tashman, Harry
S Tatro, Theodore Eugene
S Tonkel, David
SS Torpy, William Owen
S Walcutt, Frank
S Warsher, Adolph
S Wasserberger, Emil Henry
A Weinstein, Julius
S Weinstein, William
SS Weissman, David L.
A Wiess, Bernard
SS Wiesenberger, Milton
S Wolf, George Meyer
A Zareko, Nicholas
S Zucker, Benjamin
S Zweifler, Isaac

LOWER FRESHMAN CLASS

S Aaronstein, Aaron H.
S Abend, Harry L.
S Alexander, Harvey
S Aronowitz, Benjamin
S Aronowitz, Isidore
S Aronowitz, Samuel
S Arons, Lester
S Balos, Henry H.
S Barasch, Julius S.
S Baron, William Sidney
S Baronsky, Paul
S Barth, Eleazer
S Benedetto, John B.
S Bolkowitz, Leon
S Borock, Sydney
SS Boyer, William V.
S Bracco, Vincent A.
S Brill, Jacob
S Brimberg, Isaac
SS Brody, Meyer
A Bronstein, Robert
S Brown, Daniel
S Callaghan, Nicholas P.
S Carlotti, Joseph
S Chapman, Edgar Harry Arthur
SS Chernis, Leon
S Circelli, Xavier S.
A Clark, Arthur J.
S Clark, Percy Lancelot
S Cohen, Davis
S Crescenzi, Thomas L.
S Damico, Daniel
S Darwick, Eli
S Denemark, Nathan
S D'Oronzio, George B.
S Duckor, Louis
SS Dunkel, Joseph
SS Elias, Percy
SS Ellisberg, Abraham
S Englebardt, Harold Sidney
S Falkenberg, Ernest E.
S Feigenbaum, Arthur
SS Feldman, David H.
S Ferber, Louis
S Fiedler, Michael
S Fleck, Joseph
A Fishkin, Sidney L.
S Fox, Morris
S Frankowitch, Hyman
A Freisinger, Alvin
S Friedland, Samuel
SS Friedman, Irving
S Gerstenfeld, Nathan
S Ginsberg, Nathan
S Glick, Bernard
S Glick, Reuben
S Goldfinger, Jesse
A Goldwater, Leonard John
S Golomb, Eliazer
S Gordonson, Julius
A Green, Wallace
S Greenberg, Paul
S Gurland, Nathan H.
A Haber, George W.
S Hemshovitz, Julius K.
A Hill, William
S Hirsch, Max
A Hirshowitz, Samuel
S Kadish, Isidore
S Kameh, Daniel H.
S Kaplan, Louis
S Kapler, Irving
S Kaprow, Barnet
SS Kaufman, Aaron H.
S Kaufman, Irving
S Kaufman, Morris
S Kiel, Meyer
A Kinzel, Robert
S Kirschner, Morris
S Klein, Morris
S Klieves, Charles A.
S Koeppel, Harry
S Kushelewitz, Harry
S Ladas, George
S Landesman, Harry
S Lazarowitz, Samuel
SS Lebauer, Maurice Lee
S Lempert, Samuel
SS Leung, Chick Wae
A Levey, Henry
S Levine, Alexander E.
S Levy, Samuel
SS Lieberman, David
S Lyman, Joseph C.
S Magenheimer, Frederick J.
S Maggiani, Euclid
S Malerba, Vincent P.
S Marcus, David
A Meyerson, Herman
S Miller, Morris
S Mirabella, Ludovica
SS Modr, Joseph A.
S Montilli, Pasquale
S Moskowitz, Henry
S Moustakis, Gabriel E.
S Muller, Erwin T.
SS Muller, Joseph Clarence
S Murphy, Charles G.
S Nachamie, Irving
S Nachemson, Moe
S Nemensky, Harry
S Neustein, Irving Daniel
S Novick, Philip
S Nuccio, Lawrence
S Olofsky, Samuel

S Ossipoff, Leon
S Paley, Murray Z.
S Pam, Max
S Panaro, Peter T.
S Panisch, Joseph
S Parker, Kenneth
A Pascuma, Pasquale
S Pell, Howard K.
S Peller, Samuel
S Peyser, Walter
A Pilat, Oliver R.
S Polakoff, Morris
S Pregerman, Louis J.
S Puglisi, Anthony
S Pullman, Edward
S Rafle, Philip J.
S Rapport, David
A Reed, Louis S.
S Reinhardt, Edgar
S Rendelstein, Joseph D.
S Rielberg, Louis
S Robert, Silvio Andrew
S Rosenthal, Abraham
A Roth, Samuel
S Ruben, Morris H.
A Rubino, Joseph
S Rudick, Abraham
S Ruh, Edmund J.
S Sachs, Louis
SS Sandler, Milton Sydney
S Scher, Alexander
S Schlesinger, Milton
S Schwartzfarb, Harry J.
S Shanik, William
S Shapiro, Harry P.
S Sherman, Sol
S Silverman, Harry
SS Silberman, Philip
S Silvestri, Vincent
SS Simonowitz, Louis J.
S Slackman, Joseph Wm.
S Sokohl, Emanuel
S Soo-Hoo, Check-Mo
S Spiegel, Harry
S Stahl, William A.
S Steinberg, Louis
S Steiner, Geza
SS Sternberg, Louis
S Sternin, Samuel
S Suchow, Abraham L.
A Sugarman, Elias E.
S Swainson, W. Leopold
S Taft, Isidore I.
S Tangred, Albert A.
S Teitelbaum, Morris
S Tekulsky, George T.
SS Tepfer, Gustave
S Tortora, Edward Joseph
S Tortorici, Nicholas C.
S Ultan, Carl
S Wahrhaftig, Bernard
S Weiner, Samuel
S Weinstein, Louis
S Weisberger, John J.
A Weisman, Samuel
SS Weiss, Benjamin
S Weiss, Joseph J.
S Willig, Isidore
S Wiltchik, Morris
A Wimberly, Rufus E.
S Wohlfart, Gustave Adolf
S Yacht, Max
S Zaubler, Norman W.
S Zisfein, David
S Zucker, Harry T.

School of Technology

D'Atri, Americus
Goldberg, Henry J.
Goldman, Benjamin S.
Kamener, Louis
Kosarsky, Alex. Louis
Lucek, Charles Wm.
Melden, Jerome L.
Minikes, Max
O'Connor, John Arthur
Saltzman, Benjamin
Siegel, Leo
Trinin, Samuel
Weiss, Theodore F.
Wolinsky, Moses

Special Students

Alexander, Irving
Aronson, William
Bernstein, J. L.
Bloom, Sidney J.
Borochow, Solomon
Burt, Louis N.
Charos, Harry
Cohen, Alexander
Daub, Arthur B.
Di Lorenzo, Louis L. S.
Dubin, Ralph
Dyer, Benjamin Francis
Falkenburg, Neil
Faragoh, Francis Edward
Fierstein, William
Gallagher, William F.
Generi, John
Golden, Isador I.
Hader, Frank R.
Heilbraun, William
Hirsh, Myron
Horowitz, Meyer
Houston, Ulysees Grant
Hundley, Robert C.
Kammitter, John
Kreisberg, Maurice Jacob
Lerner, Max
Levy, Jacob Hai
Mandel, David
Mangione, John
Meeropolsky, Leopold
Murakami, Peter T.
Mustakis, Demetrius C.
Nachtman, Jack S.
Norton, William J., Jr.
Nygood, Abraham
Pasternak, Jacob L.
Pentel, Louis Simon
Peters, Preston B.
Pollack, Isidor
Poplowsky, George
Rabinowitz, Samuel
Rachlin, Hyman L.
Rebhuhn, Benjamin
Roh, Robert
Rowe, Nathan C.
Russo, Nicholas Dante
Schorr, Henry A.
Simon, Benjamin
Solow, Harry B.
Tupayachi, Ricardo
Walz, Joseph Edward
Weber, Francis J.
Williams, Vivian L.
Zweigel, Isidore

DIRECTORY OF OFFICERS

BOARD OF TRUSTEES

Bellamy, Frederick P.....204 Montague Street, Brooklyn

Hyde, James W.....10 Wall Street

Kohns, Lee.....42 Warren Street

Larkin, William P.....416 West 13th Street

McAneny, George.....*The Times* Annex, West 43d Street

McCombs, William F.....61 Broadway

Prall, Anning S.....130 College Ave., Westerleigh, Staten Island

Stroock, Moses J.....141 Broadway

Tuttle, Charles H.....34 Nassau Street

Weiss, Albert.....447 East 84th Street

OFFICERS OF ADMINISTRATION AND INSTRUCTION

ABBREVIATIONS

Main —Main Building
C. H. —Compton Hall (Engineering Building)
Chem. —Chemistry Building
Hyg. —Hygiene Building
T. H. H. —Townsend Harris Hall
Com. —Commerce Building
Mun. —Municipal Building
Br. —Brooklyn Branch

Adams, Hugh W., Jr.,	Com.	262 Palisade Ave., Yonkers.
Albrecht, Arthur E.,	Main	1681 Lexington Ave.
Allen, Joseph,	Main	9 Myrtle St., White Plains.
Alles, Robert H.,	T. H. H.	607 W. 146th St.
Ambler, Robert A.,	Hyg.	78 Elwood St.
Appleby, Alfred Noel,	Main	552 Dean St., Brooklyn.
Arbib-Costa, Alfonso,	Main	500 W. 144th St.
Arland, Otto B.,	C. H.	Little Falls, N. J.
Arnold, Samuel B.,	Main	Hotel Wentworth, 59 W. 46th St.
Arundale, Henry B.,	Com.	36 Carleton St., E. Orange, N. J.
Atticks, Harry J.,	C. H.	116 W. 39th St.
Autenrieth, George C.,	Main	959 Boulevard E., Weehawken, N. J.
Babor, Joseph A.,	Chem.	1349 First Ave.
Bachrach, Simon,	Com.	2041 Fifth Ave.
Baldwin, Samuel A.,	Main	611 W. 137th St.
Ball, Allan P.,	Main	544 W. 157th St.
Barker, Henry N.,	Com.	530 W. 136th St.
Baruch, Bernard	Com.	277 Albany Ave., Brooklyn.
Baskerville, Charles,	Chem.	611 W. 110th St.
Baum, Harry,	C. H.	825 W. 180th St.
Bauman, Ben.,	Main	1049 Morris Ave.
Bergeron, Maxime L.,	Main	511 W. 146th St.
Berk, David,	Com.	1414 46th St., Brooklyn.
Bernfeld, Lupescu Moritz,	Main	795 St. Nicholas Ave.
Bernner, Milton St. John,	Com.	46 Whitney Ave., Elmhurst.
Bernstein, Alton J.,	Br.	1043 So. Boulevard.
Billing, Wyly McG.,	Chem.	535 W. 113th St.
Blau, Benjamin L.,	Com.	1239 Simpson St.
Bliss, Henry Evelyn,	Main	25 Belden Ave., Dobbs Ferry.
Bonaschi, Albert C.,	Com.	1966 Valentine Ave.
Bowden, Joseph,	Br.	24 Clifton Place, Brooklyn.
Boyd, William B.,	Hyg.	121 E. 78th St.
Bradley, Barclay W.,	T. H. H.	548 Riverside Drive.
Brand, E. R.,	Main	120 E. 95th St.
Bredekamp, Henry,	Main	59 East End Ave.
Brett, George Monroe,	Main	404 W. 116th St.
Brewster, John A.,	Main	728 W. 181st St.
Brolles, John E., Jr.,	Chem.	853 Westchester Ave.
Brophy, Daniel F.,	Main	514 Tenth Ave.

Brown, Carroll N.,	Main	10 Highland Ave., Yonkers.
Brown, Robert H.,	Com.	419 W. 119th St.
Browne, William Ward,	Main	129 De Voe Ave., Yonkers.
Brownson, Carleton L.,	Main	164 W. 74th St.
Bruckner, Arthur,	C. H.	Hastings-on-Hudson.
Burchard, Lewis Sayre,	Main	606 W. 147th St.
Burke, Edmund,	Main	135 Hamilton Place.
Burns, William H.,	Com.	545 W. 144th St.
Butler, Bertram T.,	Main	186 Crescent Ave., Leonia, N. J.
Buttrick, Harold E.,	Br.	1258 President St., Brooklyn.
Byers, John R. B.,	Main	530 W. 136th St.
Camera, A. U. N.,	Main	575 Dahill Road, Brooklyn.
Canfield, Leon H.,	T. H. H.	325 Park Ave., Leonia, N. J.
Cantor, Samuel E.,	Hyg.	507 W. 134th St.
Carpentier, Marius,	Br.	602 Madison St., Brooklyn.
Carr, Stephen C.,	Main	18 W. 96th St.
Castro, John,	T. H. H.	1175 Clay Ave.
Chertcoff, Moses,	Chem.	48 E. 98th St.
Clark, A. Mortimer,	Br.	1530 E. 17th St., Brooklyn.
Coats, Harry Peter,	Chem.	505 W. 143rd St.
Cohen, Alexander,	Chem.	195 E. 32nd St., Brooklyn.
Cohen, Edward E.,	Chem.	725 E. 5th St.
Cohen, Morris R.,	Main	854 W. 181st St.
Cohen, Samuel N.,	Main	543 Sixth St.
Collins, Burtis H.,	Main	540 W. 189th St.
Collins, William E.,	Com.	31 W. 68th St.
Coleman, A. I. du P.,	Main	244 Waverley Place.
Compton, Alfred D.,	Main	371 W. 119th St.
Connolly, John M.,	Com.	10228 Ashland St.
Corcoran, Chas. A.,	Main	58 E. Kingsbridge Road.
Cosenza, Mario E.,	T. H. H.	54 Vermilyea Ave.
Coulton, Thomas E.,	Main	602 W. 137th St.
Cowen, Abraham Y.,	Com.	120 Broadway.
Cox, James W., Jr.,	Com.	320 Broadway.
Crandall, Derby, Jr.,	Main	319 W. 86th St.
Crowne, J. Vincent,	Main	607 W. 138th St.
Cruse, Creighton,	C. H.	509 W. 140th St.
Cunningham, Jos. M.,	Com.	449 West End Ave.
Curtis, Robert W.,	Chem.	26 Walbrooke Rd., Scarsdale.
Curtman, Louis J.,	Chem.	547 W. 142nd St.
Dailey, John J.,	Hyg.	18 Jumel Terrace.
Damen, Robert J.,	T. H. H.	370 Convent Ave.
D'Andrea, Albert Philip,	T. H. H.	2121 Bay Ave., Brooklyn.
Dariff, George,	Com.	1484 Eastern Parkway, Brooklyn.
Dávalos, Manuel,	Main	202 W. 86th St.
Davis, Robert V.,	Main	6 E. 94th St.
des Garennes, Jean,	T. H. H.	285 Lincoln St., Flushing.
De Witt, Benjamin P.,	Com.	37 Wall St.
Donovan, James J.,	Com.	176 Prospect Park, W., Brooklyn.
Dorsey, Hubert C.,	Hyg.	325 W. 57th St.
Downer, Charles A.,	Main	802 W. 181st St.
Dressler, Robert,	Main	518 E. 85th St.
Dyer, Cecil Ballard,	T. H. H.	34 Grove St., Pleasantville.
Edwards, George V.,	T. H. H.	1705 Montgomery Ave.
Eggleston, DeWitt Carl,	Main	419 Homestead Ave., Mt. Vernon.
Elías, Alfredo,	T. H. H.	544 W. 157th St.
Embury, David A.,	Com.	106 Northern Ave.
Estabrooke, John H.,	C. H.	431 Park Hill Ave., Yonkers.
Estabrooke, Wm. L.,	Chem.	12 Prospect Drive, Yonkers.
Ettari, Francesco,	T. H. H.	43 Mayflower Ave., New Rochelle.
Fecher, John Martin,	C. H.	69 Isabella Ave., Newark, N. J.

Fenderson, Mark,	T. H. H.	144 W. 23rd St.
Finke, Myron A.,	Com.	1182 Broadway.
Fitzpatrick, Joseph E.,	T. H. H.	321 W. 51st St.
Fontaine, André C.,	Br.	713 Eastern Parkway, Brooklyn.
Fox, Abraham Manuel,	Com.	131 Saratoga Ave.
Fox, William,	Main	457 W. 123rd St.
Fradenburgh, Adelbert G.,	Br.	182 Midwood St., Brooklyn.
Frederick, J. George,	Com.	347 Fifth Ave.
Friedland, Louis S.,	T. H. H.	560 W. 192nd St.
Friedman, Jacob A.,	T. H. H.	12 Hallett St., Astoria.
Fuentes, Ventura,	Main	518 W. 143rd St.
Fuld, Leonhard Felix,	Com.	28 W. 128th St.
Gaston, Charles Robert,	Br.	215 Abingdon Rd., Richmond Hill.
Gill, Bennington P.,	T. H. H.	971 Trinity Ave., Bronx.
Glennie, Alexander C.,	Chem.	300 Manhattan Ave.
Goldfarb, A. J.,	Main	10 St. Nicholas Terrace.
Goldsmith, Alfred N.,	Main	43 Fifth Ave.
Goldstein, Abraham M.,	Main	2515 Seventh Ave.
Goodman, Louis,	Main	470 W. 150th St.
Goodman, Theodore,	T. H. H.	612 E. 158th St.
Gottschall, Morton,	Main	947 Avenue St. John.
Gray, Herman A.,	T. H. H.	1226 Boston Road, Bronx.
Green, Howard C.,	Main	91 Fort Washington Ave.
Grendon, Felix,	Main	250 W. 85th St.
Grimshaw, Robert,	Com.	717 W. 177th St.
Grove, Charles C.,	T. H. H.	3121 Broadway.
Guilbaud, Lucien R.,	Main	195 Claremont Ave.
Guthrie, William B.,	Main	515 W. 111th St.
Haas, Harry H.,	Hyg.	502 W. 149th St.
Haight, Samuel C.,	T. H. H.	464 W. 152d St.
Halliday, Edgar,	T. H. H.	221 Eighth Ave., Brooklyn.
Hanson, Canute,	Hyg.	2497 Tiebout Ave.
Harrow, Benjamin,	Com.	2368 83rd St., Brooklyn.
Hart, David,	Chem.	1425 36th St., Brooklyn.
Haskell, William H.,	Main	Scarsdale.
Hatch, Robert H.,	Main	164 W. 74th St.
Hayes, George M.,	T. H. H.	414 Beach 127th St., Belle Harbor.
Healy, Joseph X.,	Main	317 W. 134th St.
Heard, Walter S.,	Hyg.	31 Seaman Ave.
Heberlein, Arthur A.,	Main	768 Melrose Ave.
Hecht, Nathan H.,	Chem.	1631 Prospect Pl., Brooklyn.
Heckman, Samuel B.,	Main	390 Wadsworth Ave.
Henderson, Ernest Norton,	Br.	179 St. James Place, Brooklyn.
Henry, Maxwell,	C. H.	142 W. 112th St.
Heynich, Richard O.,	T. H. H.	565 W. 144th St.
Hindle, Mrs. E. H.,	Com.	10460 113th St., Richmond Hill.
Hinds, George Kent,	Com.	92 Riverside Drive.
Hoffman, Alfred L.,	Mun.	342 President St., Brooklyn.
Holbrook, Rossiter,	Com.	47 So. Highland Ave., Ossining.
Holman, Nathan,	Hyg.	371 Grand St.
Holton, Herbert M.,	Hyg.	3872 Boston Road.
Holz, George G.,	Hyg.	2333 Creston Ave., Bronx.
Horne, Charles F.,	Main	616 W. 148th St.
Houston, Charles A.,	Com.	200 Fifth Ave.
Hubert, Warren G.,	Main	125 Lee Ave., Yonkers.
Hunt, Leigh Harrison,	Main	600 W. 146th St.
Hutchison, Frederick W.,	T. H. H.	45 E. 59th St.
Iacuzzi, Alfred,	Main	30 Henry St.
Immediato, Gerardo,	Main	304 W. 91st St.
Iserman, Maurice,	Main	227 E. 66th St.
Jahn, Richard,	Main	626 S. Ferry St., Woodhaven, L. I.

Jason, Simon J.,	Com.	436 Fort Washington Ave.
Jones, William B.,	Chem.	7 Maple St., Yonkers.
Kaltenborn, H. V.,	Br.	85 Willow St., Brooklyn.
Karlin, Harry,	Hyg.	2853 W. 24th St., Coney Island.
Kayser, Georg,	T. H. H.	3756 Park Ave.
Keep, Austin B.,	Main	433 W. 117th St.
Keiley, Jarvis,	T. H. H.	214 W. 78th St.
Keleher, Michael J.,	T. H. H.	1027 Southern Boulevard.
Kelly, J. Redding,	Main	55 W. 95th St.
Kelly, Thomas P.,	Main	535 Van Cortlandt Pk. Ave., Yonkers.
Keyes, Rowena Keith,	Br.	260 Gates Ave., Brooklyn.
Kinkeldey, Carl W.,	Main	1041 Faile St., Bronx.
Klapper, Paul,	Main	839 W. 178th St.,
Klein, David,	T. H. H.	523 W. 143rd St.
Klein, Joseph J.,	Com.	440 West End Ave.
Knickerbocker, Wm. E.,	Main	400 Convent Ave.
Kost, Henry G.,	Main	472 E. 134th St.
Krowl, Harry C.,	Main	423 W. 22nd St.
Laffargue, Gaston A.,	Main	790 Riverside Drive.
Lang, John T.,	T. H. H.	505 W. 142nd St.
Langer, Meyer,	Main	60 W. 75th St.
La Rotonda, Oswald,	Hyg.	30 W. 127th St.
Lattin, Berton,	Hyg.	1235 Lexington Ave.
Lazarus, Arthur,	Br.	217 Lefferts Ave., Brooklyn.
Lease, Emory B.,	T. H. H.	889 St. Nicholas Ave.
Lehrman, Alexander,	Chem.	130 Bradhurst Ave.
Leighton, Roy F.,	Main	492 W. 136th St.
Levitas, Arnold,	Main	863 E. 176th St.
Lichterman, Rose,	Com.	664 W. 179th St.
Liebgold, Sidney,	Chem.	346 E. 173rd St.
Lilienbloom, Frank,	Main	799 E. 150th St.
Linehan, Paul H.,	Main	346 Convent Ave.
Liptzin, Solomon,	Main	509 W. 133rd St.
Locke, L. Leland,	Br.	950 St. John's Place, Brooklyn.
London, Jacob,	Main	835 E. 152nd St.
Lorenz, Joseph,	Main	440 Riverside Drive.
McCartie, Harriet L.,	Main	845 West End Ave.
MacCleave, A. R.,	C. H.	460 W. 149th St.
MacClintock, Samuel,	Main	2635 Arlington Ave.
McCormick, Radford J.,	Hyg.	15th Ave. and 27th St., Beechhurst, L. I.
MacDougall, Robert B.,	T. H. H.	137 W. 12th St.
McKenzie, Lionel B.,	Hyg.	Grand Ave., Leonia, N. J.
McLoughlin, F. O. X.,	C. H.	706 Riverside Drive.
MacNeish, Harris F.,	Main	Scarsdale.
Maloubier, Alice J.,	Com.	305 W. 45th St.
Mandel, Frank E.,	Com.	34 Farley Ave., Newark, N. J.
Marcus, Alexander,	Main	Fort Lee, N. J.
Mariano, John Horace,	Com.	144 W. 11th St.
Marin, Rafael,	Com.	2305 Creston Ave.
Marique, Pierre J.,	T. H. H.	3270 Perry Ave.
Marsh, Howard D.,	Main	103 Overlook Terrace, Leonia, N. J.
Martin, Earl A.,	Main	715 W. 169th St.
Maule, Warren M.,	Com.	162 W. Boulevard, Ridgewood, N. J.
Mead, Nelson P.,	Main	2352 University Ave.
Meltsner, Max,	Chem.	1329 Clay Ave.
Mendelsohn, Charles J.,	T. H. H.	261 Edgecombe Ave.
Meunier-Guttin, Paul,	Com.	330 E. 51st St.
Meyer, Martin,	Chem.	126 Claremont Ave.
Mezes, Sidney Edward,	Main	280 Convent Ave.

Miller, Julius Asher,	T. H. H.	220 Audubon Ave.
Moody, Herbert R.,	Chem.	63 Hamilton Terrace.
Mooney, William W.,	Br.	82 Downing St., Brooklyn.
Moore, Thomas R.,	Main	2071 Fifth Ave.
Morse, Leighton B.,	Main	206 Christie Heights, Leonia, N. J.
Morse, Livingston B.,	Main	400 W. 160th St.
Mosher, Joseph A.,	Main	106 Northern Ave.
Mott, Lewis F.,	Main	172 W. 79th St.
Mulready, Eugene L. T.,	Main	1228 Beach Ave.
Nelson, George E.,	Main	1242 Theriot Ave.
Neus, Engelbert,	Main	151 W. 80th St.
Newman, Samuel,	T. H. H.	517 W. 135th St.
Newton, Homer C.,	Main	41 St. Nicholas Terrace.
O'Neil, Richard J.,	Hyg.	519 W. 149th St.
Orr, William Walker,	Com.	27 Waverly Place.
Ostrow, Meyer J.,	Com.	842 Hewitt Place.
Otis, Wm. Bradley,	Main	504 W. 112th St.
Palmer, Earle Fenton,	Main	828 St. Nicholas Ave.
Palmer, Erastus,	Main	260 Convent Ave.
Panaroni, Alfred G.,	Main	130 W. 123d St.
Park, James Williams,	Br.	303 Fenimore St., Brooklyn.
Parker, S. Ridley,	Br.	28 Ormond Place, Brooklyn.
Parmet, Meyer,	Com.	920 Cauldwell Ave.
Pasternak, Jacob L.,	T. H. H.	140 E. 7th St.
Patterson, Robert,	Main	972 Anderson Ave.
Patterson, William A.,	Com.	359 Lenox Ave.
Pearce, Walter H.,	Chem.	748 Eleventh Ave., Steinway, L. I. City.
Pearl, Joseph,	T. H. H.	865 W. 180th St.
Peckwell, Harry W.,	T. H. H.	2338 University Ave.
Pedersen, Frederick M.,	Main	452 W. 144th St.
Perrier, Joseph L.,	Br.	352 W. 115th St.
Philip, Maximilian,	Com.	450 W. 149th St.
Polinger, Elliot H.,	T. H. H.	1423 Wilkins Ave.
Prager, William L.,	Chem.	100 Morningside Drive.
Prashker, Louis,	Br.	200 W. 111th St.
Pugh, Alexander L.,	Com.	Pomona, Spring Valley, N. Y.
Quackenbos, G. Payn,	T. H. H.	Tuckahoe.
Redmond, Daniel W.,	Main	610 W. 178th St.
Reichardt, Paul H.,	Hyg.	440 96th St., Woodhaven, L. I.
Reynolds, Frederick G.,	Main	437 W. 147th St.
Richter, Kurt E.,	T. H. H.	2730 Creston Ave., Bronx.
Rider, Jack E.,	Hyg.	72 E. 93rd St.
Robinson, Devereux D.,	T. H. H.	68 W. 107th St.
Robinson, Frederick B.,	Main	400 W. 152nd St.
Rogers, Lawrence W.,	Com.	523 W. 138th St.
Rougier, Francis L.,	T. H. H.	Pleasantville.
Ruckes, Herbert,	Main	Dean and Fairmount Aves., Westchester.
Rupp, August,	Main	14 Hamilton Terrace.
Russoff, Abraham N.,	Chem.	728 W. 181st St.
Sanman, Louis F.,	Hyg.	181 W. 10th St.
Saphier, Conrad J.,	Com.	1062 Carroll St., Brooklyn.
Saurel, Paul L.,	Main	524 W. 150th St.
Saxton, Lynn M.,	Main	601 W. 190th St.
Schapiro, J. Salwyn,	Main	416 W. 122nd St.
Schmidt, George H.,	Hyg.	868 Columbus Ave.
Schulman, Abram G.,	Main	346 E. 173rd St.
Schulz, Gustav F.,	Main	90 Pinehurst Ave.
Schutt, Arthur,	Chem.	9 Rockledge Pl., Yonkers.
Schuyler, Livingston R.,	Main	520 W. 114th St.

Schwartz, Thomas G.,	Main	1626 Amsterdam Ave.
Schwarz, Samuel A.,	T. H. H.	590 W. 172nd St.
Senftner, Alexis E.,	T. H. H.	96 Hamilton Ave., Yonkers.
Sickels, Ivin,	Main	West Nyack.
Simonds, Stanley,	T. H. H.	18 Hamilton Terrace.
Skene, Frederick,	C. H.	411 Lockwood St., Astoria.
Smith, Philip L.,	T. H. H.	17 W. 24th St.
Smith, Raymond P.,	C. H.	4 Hawthorne St., Orange, N. J.
Smith, Robert F.,	Main	463 W. 144th St.
Snell, Foster Dee,	Chem.	3315 Broadway.
Snider, Guy Edward,	Main	401 Marlborough Road, Yonkers.
Sobel, Bernard,	Com.	205 W. 106th St.
Sonkin, Simon,	T. H. H.	347 Hudson St.
Spitzenberg, Harry M.,	C. H.	78 Jarvis Place, Lynbrook.
Stair, Bird,	Main	25 St. Nicholas Terrace.
Stalb, Walter,	Main	516 W. 148th St.
Stebbins, Homer A.,	Com.	22 Minturn St., Hastings-on-Hudson.
Stevenson, Reston,	Chem.	436 Convent Ave.
Stich, Herman J.,	Com.	961 St. Nicholas Ave.
Sufrin, Oscar J.,	Main	35 W. 110th St.
Sugarman, Arthur M.,	Com.	556 W. 140th St.
Suydam, Henry W.	Br.	172 Bainbridge St., Brooklyn.
Swenson, David F.,	Main	420 W. 119th St.
Taaffe, Thos. Gaffney,	Main	1 Pinecrest Drive, Hastings.
Tallent, James E.,	Com.	56 Markuse St., Brooklyn.
Tasch, Ulysses S.,	Com.	1270 Broadway.
Taylor, Charles R.,	Com.	968 Sherman Ave.
Teeter, Charles H.,	Mun.	3623 Ave. I, Brooklyn.
Thomas, John B.,	Main	510 W. 140th St.
Thompson, Holland,	Main	102 Waverley Place.
Toussaint, Camille A.,	T. H. H.	3688 Boulevard, Jersey City.
Tressler, Jacob Cloyd,	Br.	115 Pembroke Pl., Kew Gardens.
Troy, James Henry,	C. H.	101 W. 88th St.
Troyansky, William,	T. H. H.	5 Goerck St.
Truesdell, Waldo B.,	T. H. H.	143 Beech Ave., Mamaroneck.
Tulgan, Joseph,	Main	1327 44th St., Brooklyn.
Turner, Arthur B.,	Main	245 N. Mountain Ave., Montclair, N. J.
Turner, Egbert M.,	Main	120 Devoe Ave., Yonkers.
Turner, John P.,	Main	520 W. 122nd St.
Tynan, Joseph L.,	T. H. H.	638 W. 160th St.
Van Alstyne, William T.,	Com.	128 Broadway.
von Klenze, Camillo,	Main	62 W. 102nd St.
Waag, Herman B.,	C. H.	225 Beach 120th St., Rockaway Pk., L. I.
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Weill, Felix,	Main	402 W. 153rd St.
Weinberg, Louis,	T. H. H.	897 Riverside Drive.
Weinstein, Louis,	Com.	949 Broadway.
Weston, Arthur James,	Com.	160 N. 18th St., E. Orange, N. J.
Wetzel, Reinhard A.,	T. H. H.	218 Tecumseh Ave., Mt. Vernon.
Wheeler, Frank W.,	Hyg.	533 W. 151st St.
White, James R.,	Main	162 25th St., Elmhurst, L. I.
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Whitford, Edward E.,	Main	3681 Broadway.
Whyte, W. Alexander,	T. H. H.	Woodlawn Ter., Beechhurst, L. I.
Wickham, Joseph F.,	T. H. H.	513 W. 144th St.
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Williamson, Walter,	Hyg.	962 Anderson Ave.
Wolchonock, Louis,	Com.	1068 E. 15th St.

Woll, Frederic A.,	Hyg.	1013 Home St., Bronx.
Yaconetti, Anthony,	Main	2398 Arthur Ave.
Yarmolinsky, Abraham,	Com.	1786 Vyse Ave., Bronx.
Zaldari, Pierre,	Com.	60 Wall St.
Zemansky, Mark Waldo,	Main	98 Morningside Ave.

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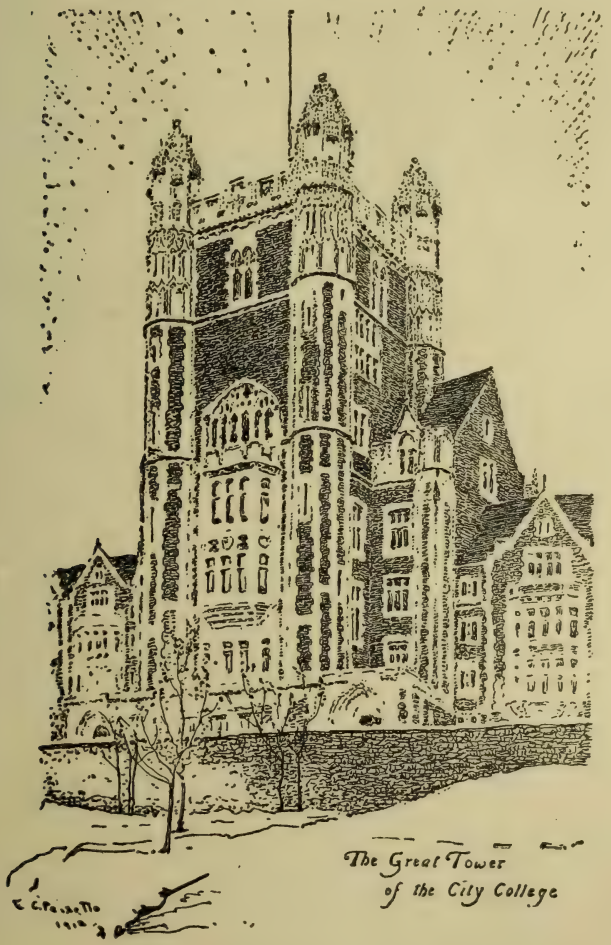
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The College of the City of New York



Annual Register, 1921-1922

THE COLLEGE OF THE CITY OF NEW YORK



The Great Tower of the City College

ANNUAL REGISTER FOR 1921-1922

Issued in January, 1922

WILLIAM BRATTER, INC., N. Y.

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COLLEGIATE CALENDAR

1921-1922

1921.

July 1, Friday, Beginning of the Summer Session.

Aug. 24, Wednesday, End of the Summer Session.

Sept. 19, Monday, Admission of New Students.

Sept. 21, Wednesday, Registration Day.

Sept. 22, Thursday, Beginning of Recitations, Fall Term.

Oct. 12, Wednesday, Columbus Day.

Nov. 8, Tuesday, Election Day.

Nov. 11, Friday, Prize Speaking.

Nov. 24, Thursday, Thanksgiving Day.

Dec. 24, Saturday, 1922. Jan. 2, Monday, } Winter Vacation.

Jan. 23, Monday, Beginning of Examinations.

Feb. 6, Monday, Admission of New Students.

Feb. 8, Wednesday, Registration Day.

Feb. 9, Thursday, Beginning of Recitations, Spring Term.

Feb. 13, Monday, Lincoln's Birthday.

Feb. 22, Wednesday, Washington's Birthday.

April 9, Sunday, April 16, Sunday, } Spring Vacation.

May 12, Friday, Prize Speaking.

May 30, Tuesday, Memorial Day.

June 9, Friday, Beginning of Examinations.

June 22, Thursday, Commencement.

July 3, Monday, Beginning of the Summer Session.

Aug. 24, Thursday, End of the Summer Session.

Sept. 18, Monday, Admission of New Students.

Sept. 20, Wednesday, Registration Day.

Sept. 21, Thursday, Beginning of Recitations, Fall Term.

THE BOARD OF TRUSTEES

THOMAS W. CHURCHILL, *Chairman*

JAMES W. HYDE, *Secretary*

	Term Expires July 1st
ALBERT WEISS	1922
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WILLIAM P. LARKIN, A.B., LL.B., LL.D	1924
GEORGE MCANENY, LL.D	1925
MOSES J. STROOCK, B.S., LL.B	1926
THOMAS W. CHURCHILL, A.B., LL.B., LL.D	1927
LEE KOHNS, B.S	1928
FREDERICK P. BELLAMY, A.M., LL.B	1929
CHARLES H. TUTTLE, A.B., LL.B	1930
ANNING S. PRALL	[*Ex-officio*]

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CURRICULUM AND BY-LAWS: MR. TUTTLE, MR. KOHNS AND MR. MCANENY.

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COLLEGE PROPERTY: MR. STROOCK, MR. WEISS, AND THE PRESIDENT OF THE COLLEGE.

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The Chairmen of the Committees on Finance, Curriculum and By-Laws, Appointments and Promotions, and College Property

From the Faculty:

The President

The Deans

Professors Downer, Baskerville and Burchard

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Professor Reynolds
Professor Mead
Professor J. P. Turner
Professor Compton
Professor Crowne

From the School of Technology:

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Professor Baskerville
Professor Goldsmith

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Dean Robinson (*ex officio*)

Professor Snider
Professor Brett

From the School of Education:

Dean Klapper (*ex officio*)

Professor Guthrie
Professor Heckman

The Curator (*ex officio*)

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HOMER CURTIS NEWTON, Ph.D., Librarian

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Bachiller en Artes, Instituto de Barcelona, 1888; Licenciado en Derecho, University of Barcelona, 1894.

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REINHARD A. WETZEL, Supervisor in Physics, in the Preparatory High School

B.S., University of Minnesota, 1901.

WILLIAM BALLANTINE BOYD, Medical Examiner, in the Preparatory High School

B.S., College of the City of New York, 1897; M.D., Columbia, 1905.

CANUTE HANSEN, Instructor in Hygiene

D.D.S., New York College of Dentistry, 1915.

GUSTAV F. SCHULZ, Instructor in Public Speaking

B.S., College of the City of New York, 1907; A.M., Columbia, 1909.

HOWARD C. GREEN, Instructor in History, in the Preparatory High School

A.B., College of the City of New York, 1902.

ARTHUR DICKSON, Instructor in Romance Languages, in the Preparatory High School

B.S., College of the City of New York, 1909; A.M., Columbia, 1911.

MORTON GOTTSCHALL, Instructor in History and in Business Law

A.B., College of the City of New York, 1913; J.D., New York University, 1917.

BERTRAM T. BUTLER, Instructor in Geology

Ph.B., Hamline, 1901; A.M., Columbia, 1908.

RADFORD J. MCCORMICK, Instructor in Hygiene

NATHAN HOLMAN, Special Instructor in Hygiene

Dipl., Savage School for Physical Education.

ARTHUR E. ALBRECHT, Instructor in Economics

A.B., College of the City of New York, 1916; M.A., George Washington University, 1917.

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Ph.B., University of Vermont, 1912; M.S., 1913; B.Ped., Syracuse, 1917.

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B.S., College of the City of New York, 1902; E.E., Columbia, 1908.

WILLIAM ARMAND HANNIG, Instructor in Education[2]
B.S., College of the City of New York, 1905; Ph.D., New York University, 1913.

OSCAR J. SUFRIN, Instructor in Economics[1]
B.C.S., New York University, 1914; C.P.A., (New York).

ROBERT H. BROWN, Instructor in Accountancy[1]
C.P.A. (New York), 1910.

ALEXANDER L. PUGH, Instructor in Economics[1]
B.S. in Econ., Pennsylvania, 1899.

[4]DAVID A. EMBURY, Instructor in Business Law[1]
A.B., Cornell, 1908; LL.B., Columbia, 1916.

JAMES E. TALLENT, Instructor in Accountancy[1]
B.S., Cooper Union, 1913; C.P.A. (New York), 1916.

FRANK E. MANDEL, Instructor in Accountancy[1]
B.S., New York University, 1911; C.E., 1914; C.P.A. (New York), 1916.

MICHAEL J. KELEHER, Instructor in English, in the Preparatory High School[3]
A.B., Georgetown, 1904; A.M., St. Francis Xavier, 1906.

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ABRAHAM L. WILBERT, Special Instructor in Accountancy[1]
A.B., College of the City of New York, 1909; M.A., New York University, 1915.

WILLIAM A. PATTERSON, Special Instructor in Accountancy[1]
A.B., Columbia, 1914; A.M., 1915.

CONRAD J. SAPHIER, Special Instructor in Economics[1]
B.C.S., New York University, 1917; M.C.S., 1919.

RAFAEL MARIN, Special Instructor in Spanish[1]
Bachelor of Arts and Sciences, Theological Seminary of Santander, Spain, 1903.

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A.B., Harvard, 1897; A.M., Columbia, 1912.

JOSEPH FRANCIS WICKHAM, Supervisor in English, in the Preparatory High School
A.B., Holy Cross, 1904; A.M., Columbia, 1908.

JOSEPH EDWARD FITZPATRICK, Instructor in English, in the Preparatory High School
A.B., Fordham, 1906; A.M., 1916.

ROBERT H. ALLES, Instructor in English, in the Preparatory High School
B. S., College of the City of New York, 1906; A.M., Columbia, 1908.

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[2]In the Afternoon Division.
[3]Also in the School of Business and Civic Administration, Evening Session.
[4]Absent on leave.

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S.B., University of Chicago, 1902; S.M., 1904; Ph.D., 1909.

JEAN DES GARENNES, Instructor in Romance Languages, in the Preparatory High School
A.M., Georgetown University, 1896; LL.M., 1897; Officier d'Académie, 1900.

AVRAHM YARMOLINSKY, Instructor in Russian[1]
A.B., College of the City of New York, 1916; Ph.D., Columbia, 1921.

HERBERT RUCKES, Instructor in Biology
B.S., Cornell, 1917; A.M., 1917.

ALEXANDER MARCUS, Instructor in Physics
B.S., College of the City of New York, 1910.

JOSEPH X. HEALY, Instructor in Public Speaking
A.B., College of the City of New York, 1912; A.M., Columbia, 1918; LL.B., Fordham, 1921.

ARTHUR SCHUTT, Instructor in Chemistry

EGBERT M. TURNER, Instructor in Education
A.B., College of the City of New York, 1916; A.M., Columbia, 1919; New York State Certified Psychologist, 1921.

WALTER H. PEARCE, Special Instructor in Chemistry

WILLIAM ALEXANDER WHYTE, Instructor in Mathematics, in the Preparatory High School
B.S., New York University, 1911.

JOHN T. LANG, Instructor in Art, in the Preparatory High School

DEVEREUX DUER ROBINSON, Instructor in Mathematics, in the Preparatory High School
M.E., Stevens Institute, 1910.

CHARLES R. TAYLOR, Instructor in Accountancy[1]
B.C.S., New York University, 1913; C.P.A. (New York), 1921.

JOHN ROSS BURNS BYERS, Instructor in Economics
B.S., University of Pittsburgh, 1918; M.S., Columbia, 1920.

ARTHUR JAMES WESTON, Instructor in Public Speaking[1]
A.B., Lehigh, 1904; M.A., Yale, 1905.

JOHN JAMES DAILEY, Special Instructor in Hygiene

JOSEPH A. BABOR, Instructor in Chemistry
B.S., College of the City of New York, 1916; A.M., Columbia, 1918.

THOMAS EVANS COULTON, Instructor in Public Speaking
A.B., College of the City of New York, 1915; A.M., Columbia, 1917.

CHARLES LEE BROAS, Instructor in Civil Engineering
B.C.E., University of Michigan, 1914; S.M., Harvard, 1916; M.S., Massachusetts Institute of Technology, 1916.

JOSEPH WILLIAM HAYWARD, Instructor in Engineering and Physics
M.Sc., Victoria University of Manchester, 1898.

[1]In the Evening Session.

FORREST HYDE, Instructor in Economics[1]
B.L., University of Virginia, 1915.

LOUIS WOLCHONOK, Instructor in Art[1]
B.S., College of the City of New York, 1919.

WALTER SCOTT HEARD, Instructor in Hygiene
D.D.S., New York College of Dentistry, 1917.

BERTON LATTIN, Instructor in Hygiene
A.B., Cornell, 1907; M.D., 1910.

RAYMOND FORREST PURCELL, Instructor in Hygiene

FRANK W. WHEELER, Instructor in Hygiene

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MARTIN MEYER, Instructor in Chemistry
B.S., College of the City of New York, 1918; A.M., Columbia, 1920.

GEORGE H. CHATFIELD, Instructor in Education[2]

THOMAS M. DONOHUE, Instructor in Education[2]
B.S., College of the City of New York, 1894; Pd.M., New York University, 1915.

JOSEPH J. EATON, Instructor in Education[2]
B.S., Harvard, 1896; A.M., Columbia, 1920.

ALBERT W. GARRITT, Instructor in Education[2]
B.S., College of the City of New York, 1890.

ISIDORE HARRY GOLDBERGER, Instructor in Education[2]
M.D., New York University, 1910.

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B.S., College of the City of New York, 1910; M.A., New York University, 1916.

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A.B., College of the City of New York, 1902; A.M., Columbia, 1906; Ph.D., Fordham, 1919.

SIMON HIRSDANSKY, Instructor in Education[2]
B.S., College of the City of New York, 1899; A.M., Columbia, 1906.

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B.S., College of the City of New York, 1906; A.M., Columbia, 1910; Ph.D., New York University, 1916.

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B.A., Hunter, 1910.

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B.S., College of the City of New York, 1896; Pd.M., New York University, 1903; A.M., Columbia, 1905.

FLORENCE M. MARSHALL, Instructor in Education[2]
A.B., Boston University, 1899; Dipl., Teachers College, 1903.

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B.S., College of the City of New York, 1916; A.M., Columbia, 1917; Ph.D., 1921.

[1]In the Evening Session.
[2]In the Afternoon Division.

JOHN B. OPDYCKE, Instructor in Education[1]

LUELLA A. PALMER, Instructor in Education[1]
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RUFUS A. VANCE, Instructor in Education[1]
LL.B., New York Law School, 1902; A.M., Columbia, 1903.

JOSEPH K. VAN DENBURG, Instructor in Education[1]
A.B., Wesleyan, 1895; A.M., 1898; Ph.D., Columbia, 1912.

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ELIZABETH A. WALSH, Instructor in Education[1]
B.S., Columbia, 1917; A.M., 1918.

GUY F. WELLS, Instructor in Education[1]
A.M., Columbia.

BERNARD SOBEL, Instructor in Business English[2]
B.S., Purdue, 1910; Ph.B., University of Chicago, 1910; M.A., University of Wisconsin, 1918.

LOUIS PRASHKER, Instructor in Business Law[2]
A.B., College of the City of New York, 1913; J.D., New York University, 1917.

PHILIP W. L. COX, Instructor in Education
A.B., Harvard, 1905; A.M., 1914.

DAVID BERK, Instructor in Accountancy[2]
B.S., College of the City of New York, 1918.

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B.S., College of the City of New York, 1918.

HERMAN ARNOLD GRAY, Instructor in History, in the Preparatory High School
A.B., College of the City of New York, 1916; A.M., Columbia, 1918.

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B.C.S., New York University, 1917; C.P.A. (New York), 1920.

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[2]In the Evening Session.

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B.S., College of the City of New York, 1901; M.A., New York University, 1905; Pd.M., 1909.

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A.B., University of Indiana, 1912.

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A.B., College of the City of New York, 1902; LL.B., New York Law School, 1907; Pd.M., New York University, 1915.

CHRISTINE DOBBINS, Special Instructor in Education[1]

IDA E. FISCHER, Special Instructor in Education[1]
B.A., Hunter.

S. WORDSWORTH FOX, Special Instructor in Education[1]
A.B., College of the City of New York, 1897.

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A.B., Syracuse, 1894; A.M., 1897.

MICHAEL A. JONES, Special Instructor in Education[1]

VAN EVRIE KILPATRICK, Special Instructor in Education[1]
A.B., Syracuse, 1891; A.M., 1894.

CECILE KING, Special Instructor in Education[1]
B.S., Columbia, 1906.

FREIDA KOHN, Special Instructor in Education[1]
Dipl., Teachers College, 1919.

CHARLES W. LAFFIN, Special Instructor in Education[1]
A.B., College of the City of New York, 1903; M.A., New York University.

CLYDE C. LISTER, Special Instructor in Education[1]

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EMILY A. O'KEEFE, Special Instructor in Education[1]
Dipl. in Physical Education, Wellesley, 1906.

ROWLAND A. PATTERSON, Special Instructor in Education[1]

WILLIAM E. REED, Special Instructor in Education[1]
B.S., New York University, 1909; M.A., 1916.

FLORENCE W. SLATER, Special Instructor in Education[1]
B. S., Cornell.

SAMUEL TANENBAUM, Special Instructor in Education[1]
B.S., College of the City of New York, 1903.

MARTHA S. TOURTE, Special Instructor in Education[1]

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[1]In the Afternoon Division.

JOSEPHINE BRITTON, Special Instructor in English[1]
A.B., Cornell, 1907; A.M., 1908; Ph.D., 1910.

ALFRED C. BRYAN, Special Instructor in Government[1]
A.B., Johns Hopkins, 1892; Ph.D., 1896.

E. E. GILTNER, Special Instructor in History[1]
A.B., University of Indiana, 1904; A.M., Columbia, 1907.

MARIE FLORENCE MACCONNELL, Special Instructor in Music[1]

JOHN DOMERHUIZEN, Special Instructor in Education[1]

CECIL BALLARD DYER, Assistant Instructor in English, in the Preparatory High School
A.B., College of the City of New York, 1912.

MARK FENDERSON, Assistant Instructor in Art, in the Preparatory High School

THEODORE GOODMAN, Assistant Instructor in English, in the Preparatory High School
A.B., College of the City of New York, 1915; A.M., Columbia, 1919.

BENNINGTON P. GILL, Assistant Instructor in Mathematics, in the Preparatory High School
A.B., College of the City of New York, 1917; B. S., 1917; A.M., Columbia, 1918.

ALBERT PHILIP D'ANDREA, Assistant Instructor in Art, in the Preparatory High School
A.B., College of the City of New York, 1918.

PHILIP LATHROP SMITH, Assistant Instructor in Mathematics, in the Preparatory High School
B.A., Yale, 1917.

WILLIAM TROYANSKY, Assistant Instructor in Romance Languages, in the Preparatory High School
A.B., College of the City of New York, 1918.

SIMON SONKIN, Assistant Instructor in Physics, in the Preparatory High School
B.S., College of the City of New York, 1920.

JOHN VALENTE, Assistant Instructor in English, in the Preparatory High School
A.B., University of Pennsylvania, 1911.

JACOB A. FRIEDMAN, Assistant Instructor in History, in the Preparatory High School
A.B., College of the City of New York, 1919; A.M., Columbia, 1920.

GEORGE G. HOLZ, Dental Examiner, in the Preparatory High School
D.D.S., New York College of Dentistry, 1915.

JULIUS ASHER MILLER, Tutor in Education
M.D., New York University, 1914.

OSWALD LA ROTONDA, Tutor in Hygiene
M.D., University and Bellevue Hospital Medical College, 1913.

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[1]In the Afternoon Division.

MAX MELTSNER, Tutor in Chemistry
A.B., College of the City of New York, 1906; M.S., New York University, 1911.

JACK E. RIDER, Tutor in Hygiene

WILLIAM B. JONES, Special Tutor in Chemistry

ABRAHAM M. GOLDSTEIN, Tutor in Physics
B.S., Cooper Institute, 1916.

GEORGE H. SCHMIDT, Tutor in Hygiene
A.B., College of the City of New York, 1919.

BENJAMIN HARROW, Tutor in Accountancy[1]
B.A., New York University, 1913; C. P. A. (New Hampshire), 1920.

MEYER J. OSTROW, Tutor in Accountancy[1]
C.P.A. (New York), 1916.

WILLIAM T. VAN ALSTYNE, Tutor in Accountancy[1]
Ph.B., Yale, 1910; LL.B., Columbia, 1913.

ROBERT ALAN AMBLER, Tutor in Hygiene
A.B., King College, 1913.

SAMUEL E. CANTOR, Tutor in Hygiene
Dipl., Savage School of Physical Education.

E. R. BRAND, Tutor in Education
A.B., Columbia, 1919.

LOUIS FREDERICK SANMAN, Medical Examiner in the Preparatory High School
B.Sc., University of Nebraska, 1914; M.D., Columbia, 1916; Graduate, Army Medical School, 1919.

HARRY H. HAAS, Tutor in Hygiene

DAVID HART, Tutor in Chemistry
B.S., College of the City of New York, 1918.

ALEXANDER LEHRMAN, Tutor in Chemistry
B.S., College of the City of New York, 1918; A.M., Columbia, 1920.

JOHN E. BROLLES, JR., Tutor in Chemistry
B.S., College of the City of New York, 1918.

ELLIOT H. POLINGER, Tutor in Romance Languages, in the Preparatory High School
A.B., College of the City of New York, 1920.

ALFRED IACUZZI, Tutor in Romance Languages[1]
A.B., College of the City of New York, 1917; A.M., Columbia, 1919.

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B.C.S., New York University, 1914; C.P.A. (New York), 1918.

HARRY M. SPITZENBERG, Tutor in Mechanical Engineering

JOHN M. CONNOLLY, Tutor in Economics[1]
A.B., Harvard, 1917.

[1]In the Evening Session.

JOHN CASTRO, — Tutor in Romance Languages, in the Preparatory High School
Lyceum Diploma, Palermo, 1905.

JOHN HORACE MARIANO, — Tutor in Economics[1]
A.B., Columbia, 1916; A.M., 1919; Ph.D., New York University, 1920.

JOSEPH M. CUNNINGHAM, — Tutor in Economics[1]
B.S. in Econ., University of Pennsylvania, 1917.

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M.D., Columbia, 1911.

RICHARD W. GREVÉ, — Tutor in Accountancy[1]
Graduate in Accountancy, College of the City of New York, 1920.

JOSEPH TULGAN, — Tutor in Biology
A.B., College of the City of New York, 1920; A.M., Columbia, 1921.

MARK WALDO ZEMANSKY, — Tutor in Physics
B.S., College of the City of New York, 1921.

EDNA FARNSWORTH, — Tutor in Education[2]

WILLIAM FLANAGAN, — Tutor in Education[2]

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B.S., St. Lawrence University.

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LEROY BARKER, — Tutor in Education[2]
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ANNIE COE, — Tutor in Education[2]
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THOMAS DARLING, — Tutor in Education[2]

ARTHUR GARDNER, — Tutor in Education[2]
B.S., College of the City of New York, 1909.

THOMAS HOGAN, — Tutor in Education[2]
Dipl. in Iudustrial Arts, Teachers College, 1910.

WALTER MAHER, — Tutor in Education[2]

CHARLES MULLER, — Tutor in Education[2]

WILLIAM RUSHFORTH, — Tutor in Education[2]

LAURENCE J. YOUNG, — Tutor in Education[2]

SAMUEL ZUCKER, — Tutor in Education[2]

MOSES A. BERENSON, — Tutor in Accountancy[1]
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[1]In the Evening Session.
[2]In the Afternoon Division.

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B.S., College of the City of New York, 1917; M.B.A., New York University, 1921.

ALVA TURNER, Tutor in Mathematics
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ARTHUR KING DOOLITTLE, Tutor in Mathematics
B.S., Columbia, 1920.

STANLEY M. BROWN, Tutor in Government and Sociology[1]
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B.S., College of the City of New York, 1920.

ROBERT E. OLMSTED, Tutor in Economics[1]
B.S. in Econ., University of Pennsylvania, 1921.

LAWRENCE B. MANN, Tutor in Economics[1]
A.B., Harvard, 1915.

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D.D.S., New York College of Dentistry, 1921.

THOMAS GEORGE SCHWARTZ, Library Assistant
A.B., College of the City of New York, 1912.

SIDNEY LIEBGOLD, Clerical Assistant in Chemistry

HENRY BREDEKAMP, Laboratory Assistant in Physics

SAMUEL N. COHEN, Clerical Assistant in the Dean's Office
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GEORGE E. NELSON, Library Assistant

DANIEL FRANCIS BROPHY, Clerical Assistant in the Dean's Office
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GEORGE KAYSER, Laboratory Assistant in Physics, in the Preparatory High School

HARRY KARLIN, Fellow in Hygiene

ALFRED D. REUTERSHAN, Fellow in Hygiene
Dipl., Savage School of Physical Education, 1921.

MOSES CHERTCOFF, Fellow in Chemistry
B.S., College of the City of New York, 1918.

HERMAN B. WAAG, Fellow in Electrical Engineering[1]
M.E., Cornell, 1918.

[1]In the Evening Session.

FOSTER DEE SNELL, Fellow in Chemistry
B.S., Colgate, 1919.

HARRY PETER COATS, Fellow in Chemistry
B.S., Hobart, 1917; A.M., Columbia, 1918.

SAMUEL BERNSTEIN, Fellow in History

LOUIS THUOR, Fellow in Chemistry
B.S., College of the City of New York, 1921.

HENRY K. MILLER, Fellow in Chemistry
B.S., Princeton, 1920; A.M., Columbia, 1921.

ALEXANDER GROSS, Fellow in Biology

HENRY SEMAT, Fellow in Physics

JAMES FREDERICK WHITE, Fellow in Chemistry
A.B., Baldwin-Wallace College, 1920.

GEORGE HUGH WALLACE, Fellow in Chemistry
B.S., Union, 1917.

LEO LEHRMAN, Fellow in Chemistry
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SAMUEL RIFKIN, Fellow in Biology

FREDERIC LUDWIG WEBER, Fellow in Chemistry[1]
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ADDITIONAL INSTRUCTORS IN SPECIAL COURSES

LUCIEN R. GUILBAUD, French
B-ès-L., Lyons, 1908; B-ès-Sc., 1909.

PAUL MEUNIER-GUTTIN, French

ARTHUR M. SUGARMAN, Stenography and Typewriting
A.B., College of the City of New York, 1900.

HERMAN J. STICH, Stenography and Typewriting
A.B., College of the City of New York, 1916; C.S.R. (New York), 1917.

ROSE LICHTERMAN, Stenography and Typewriting
B.A., Hunter, 1911.

JOHN V. WALSH, Stenography
A.B., College of the City of New York, 1904.

MRS. E. DE LA GARZA, Spanish Stenography

HENRY B. ARUNDALE, Textiles

JAMES W. COX, JR., Textiles
M.E., Cornell, 1909.

BERNARD BARUCH, Textiles
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[1]In the Evening Session.

SIMON J. JASON, Bookkeeping
A.B., College of the City of New York, 1906; LL.B., New York University, 1909; M.A., 1914.

ARNOLD LEVITAS, Typography
LL.B., New York State Law School, 1910.

LUPESCU MORITZ BERNFELD, Building Construction
C.E., Columbia, 1909.

JAMES HENRY TROY, Automobile Mechanics

RAJANI KANTA DAS, Population and Labor
M.Sc., University of Missouri, 1911; M.A., University of Wisconsin, 1912; Ph.D., 1917.

HELEN ELIZABETH O'BRIEN, Law
LL.B., Boston University, 1919; A.M., Columbia, 1920.

CHARLES M. PAPPAS, Automobile Mechanics

GEORGE E. COOK, Automobile Mechanics

EDWARD N. GREEN, Automobile Mechanics

ALFRED L. PETERSON, Automobile Mechanics

GEORGE W. POILLON, Automobile Mechanics

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Sc.B., New York University, 1907; LL.B., New York Law School, 1910.

MAX B. GREENSTEIN, Accountancy
B.S., College of the City of New York, 1899; M.A., New York University, 1903.

MARK I. MARKETT, Gregg Stenography
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HAROLD H. SMITH, Typewriting Teaching

HAROLD STRUMPF, Stenography and Typewriting
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B.S., New York University, 1904; C.E., 1906.

NICHOLAS MARTY, Building Construction

DOROTHY LICHTERMAN, Stenography
B.A., Hunter, 1915.

KATHERINE DABNEY, Training for Girl-Scout Leadership
B.A., Cincinnati, 1914; A.M., Columbia, 1917.

Additional Instructors in the Rehabilitation Courses for Disabled Soldiers

JOHN MARTIN FECHER, Machine Shop Practice

HARRY J. ATTICKS, Stationary Engineering
C.E., Lehigh, 1893.

OTTO B. ARLAND, Electric Wiring
E.E., Mining Institute, Freiburg, Germany, 1902.

JOHN B. THOMAS, Construction Superintendence
A.B., Princeton, 1888; A.M., 1891.

JOHN H. ESTABROOKE, Mechanical Drafting
M.E., I. C. S., 1907.

ABRAHAM N. RUSSOFF, Photography

MAXWELL HENRY, Electric Wiring

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M.E., Brooklyn Polytechnic Institute, 1918.

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AMBROSE T. BUCKLEY, Electric Wiring

FRED W. HANBURGER, Construction Superintendence

RAPHAEL H. VANDERBROOK, Construction Superintendence
B.S., Cooper Union, 1908; C.E., 1913.

WILLIAM MICHELS, JR., Construction Superintendence
B.S., Cooper Union, 1915; C.E., 1915.

JOHN H. SCHNEPEL, Construction Superintendence
B.S., College of the City of New York, 1893; M.E., Cornell, 1895.

ROBERT A. PHILIPSON, Construction Superintendence
C.E., Cornell, 1919.

JAMES B. GLAZE, Photography

BRET HARTE WHITMAN, Photography

WILLIAM OTIS LYMAN, Photography

MRS. MINNIE M. STEWART, Photography

MARK JUDGE, Automobile Mechanics

HENRY J. PLOCK, Mechanical Drafting
B.S., College of the City of New York, 1921.

NOEL APPLEBY, Mechanical Drafting
B.S., College of the City of New York, 1920.

LOUIS J. EIBSEN, Mechanical Drafting
M.E., Stevens Institute of Technology, 1909.

CHARLES COSTELLO, Machine Tool Room Clerk

BENJAMIN G. HERRLEY, General Mechanic

IN THE BROOKLYN BRANCH OF THE EVENING SESSION

HERBERT L. BRIDGMAN, Adviser in Journalism
B.A., Amherst, 1866; LL.D., 1920. Business Manager of *The Brooklyn Standard Union.*

ADELBERT GRANT FRADENBURGH, Professor in Adelphi College, Economics and History
A.B., Allegheny, 1890; A.M., 1893; Ph.D., Wisconsin, 1894.

ERNEST NORTON HENDERSON, Professor in Adelphi College, Philosophy
Ph.B., California, 1890; A.B., 1893; A.M., 1894; Ph.D., Columbia, 1903.

JAMES WILLIAMS PARK, Professor in Adelphi College, Education and Government
B.A., Amherst, 1903; A.M., Harvard, 1915.

JOSEPH BOWDEN, Professor in Adelphi College, Mathematics
B.A., Yale, 1891; Ph.D., 1897.

WILLIAM WEST MOONEY, Professor in Adelphi College, Latin
B.A., Vanderbilt, 1899; M.A., 1904; Ph.D., Princeton, 1913.

WILLIAM A. COLWELL, Professor in Adelphi College, German
A.B., Denison, 1899; A.M., Harvard, 1902; Ph.D., 1906.

EDGAR ALBERT HALL, Professor in Adelphi College, English
B.A., University of Wisconsin, 1906; M.A., 1909; Ph.D., University of Chicago, 1918.

META ELIZABETH SCHUTZ, Professor in Adelphi College, History
A.B., Adelphi, 1906; A.M., Columbia, 1914.

HANS KALTENBORN, Lecturer in Journalism
A.B. Harvard, 1909. Assistant Business Editor of *The Brooklyn Daily Eagle.*

ELIAS LIEBERMAN, Lecturer in Poetry Writing
A.B., College of the City of New York, 1903; Ph.D., New York University, 1911.

L. LELAND LOCKE, Instructor in Mathematics
A.B., Grove City College, 1896; A.M., 1901.

CHARLES ROBERT GASTON, Instructor in English
Ph.B., Cornell, 1896; Ph.D., 1904.

A. MORTIMER CLARK, Instructor in English
B.S., New York University, 1910; M.A., 1912.

JOSEPH LOUIS PERRIER, Instructor in Spanish
B-ès-L., Montpellier, 1892; A.M., Columbia, 1906; Ph.D., 1909.

JACOB CLOYD TRESSLER, Instructor in Public Speaking
A.B., Syracuse, 1906; A.M., Columbia, 1912.

BURT M. THOMPSON, Special Instructor in Accountancy

HARVEY J. SWANN, Instructor in French
A.B., Brown, 1905; A.M., Harvard, 1906; Ph.D., Columbia, 1918.

WILLIAM H. ANDREWS, Instructor in Physical Training

ARLENE BROOKS VOORHEES, Instructor in Physical Education for Women
A.B., Adelphi, 1918.

WILLIAM ESDAILE BYLES, Instructor in Accountancy
A.A., College of Preceptors, England.

MONTEFIORE JUDELSOHN, Instructor in French
A.B., College of the City of New York, 1911.

HARRY OSBORN LEETE, Tutor in Accountancy
C.P.A. (Rhode Island, New Hampshire and Vermont), 1919.

HAROLD WISAN, Tutor in Business Law
A.B., College of the City of New York, 1917.

STANDING COMMITTEES[1]

ADMINISTRATIVE BOARD FOR THE PREPARATORY HIGH SCHOOL: Professors Cosenza, Klapper, White, Brownson, Horne, Schuyler, Woll, Kost, W. W. Browne, Bruckner, Whitford, and Camera, and Messrs. Chase, Wickham, Canfield, Quackenbos, Hayes, Wetzel, and Damen.

ADMISSION: Deans Brownson, Robinson, Skene, and Klapper, and Professors Livingston Morse, C. N. Brown, Brewster, Heckman, Smith, and Panaroni.

ADVISORY COMMITTEE ON COMMITTEES: Professors Saurel, Snider, and Crowne.

ATHLETICS: Professors Storey, Holton, Linehan, Williamson, and Fuentes.

DISCIPLINE: Professors Brownson, Allen, and Krowl.

EMPLOYMENT: Professors Burke, Pedersen, Whiteside, and Estabrooke.

HIGH SCHOOLS: Professors Klapper, Cosenza, Weill, Prager, White, Neus, Autenrieth, Goldsmith, Burchard, Goldfarb, Curtman, Curtis, Overstreet, Philip, Keep, and Schulman, and, *ex officio,* the members of the Committee on Admission.

LIBRARY: The President, and Professors Newton (Librarian), Sickels, Thompson, Compton, Klapper, Neus, and McLoughlin.

MARSHALS: Professors Erastus Palmer, A. B. Turner, Mosher, Woll, Otis, and Leighton Morse.

PUBLIC LECTURES: Professors Duggan, Baldwin, Guthrie, and Stair.

STUDENT ACTIVITIES: Deans Brownson, Robinson, Skene, and Klapper, and Professors Downer, Fox, Moore, Coleman, Stevenson, Marsh, Grendon, Kelly, Hubert, Burchard, Corcoran, Williamson, Hunt, Rupp, E. F. Palmer, Compton, Saxton, and Whiteside.

RESEARCH: Professors Baskerville, Cohen, Scott, Heckman, and Goldsmith.

THE LUNCH ROOM: Professors Guthrie, Moore, and Compton.

THE CO-OPERATIVE STORE: Professors Moore, Allen, Brett, and Panaroni.

[1]For the Standing Committees of the separate Faculties of Liberal Arts and Science, Technology, Business and Civic Administration, and Education, see pages 44, 57, 62 and 74.

THE COLLEGE—ITS HISTORY, BUILDINGS AND ORGANIZATION

The College of the City of New York, originally called the Free Academy, was established in 1848 by the Board of Education of the City of New York, in pursuance of an act of the Legislature of the State passed on May 7, 1847, and ratified by a vote of the people of the city, June 9, 1847. The first class entered in January, 1849, and completed its course in July, 1853. In the following year the Legislature empowered the institution to confer upon its graduates the usual collegiate degrees and diplomas in Arts and Science. In 1866, upon the recommendation of the Board of Education, the Legislature changed the name to *The College of the City of New York,* and conferred on the institution the powers and privileges of a college, according to the Revised Statutes of the State, rendering it subject to the provisions of the statutes relative to colleges and visitation of the Regents of the University, in like manner with other colleges of the State, and making the members of the Board of Education, *ex officio,* the Trustees of the College. In the year 1882, the Legislature repealed so much of the statutes relating to the College as had made attendance at the public schools of the city a requisite for admission, thus opening the College to all young men of the city of proper age and sufficient preparation.

In May, 1900, by amendment of the foregoing provisions, the Legislature created a separate Board of Trustees charged with the sole care and control of the College. This Board is composed of ten members, nine appointed by the Mayor, with the President of the Board of Education of the City of New York, as, *ex officio,* an additional member. The other members serve for nine years, one being appointed each year.

Through further amendments in 1915, 1916 and 1918, the Board of Trustees was authorized by the Legislature to provide, in addition to the curricula in Liberal Arts and Science, technical and other courses, either gratuitously or otherwise, in such administrative and pedagogical divisions as the Board might create, and to confer appropriate degrees, diplomas, and certificates; to prescribe also conditions of admission and fees for any courses for non-matriculated or non-resident students; and to admit women as students, under such conditions as might be determined.

Buildings. In September, 1907, the College removed from the buildings which from its foundation it had occupied at the corner of Twenty-third Street and Lexington Avenue, to the five new

buildings which the City had erected for it on Washington Heights, between One Hundred and Thirty-eighth and One Hundred and Fortieth Streets, Amsterdam Avenue and St. Nicholas Terrace. These buildings stand upon an elevation midway between the Hudson and the Harlem rivers and rise immediately above St. Nicholas Park, which lies about them to the north and east, and affords a permanently unobstructed view over a large part of the city. Their location insures not only an attractive environment and space for recreation, but also freedom from most of the noises of the city streets. The new group includes the following buildings, which were formally dedicated on May 14, 1908:

The Main Building, containing rooms for most of the departments of study, besides the Great Hall, the Library and the executive offices.

The Chemistry Building.

Compton Hall, the Engineering Building.

Townsend Harris Hall, occupied chiefly by the Preparatory School.

The Hygiene Building.

All these buildings are in the collegiate Gothic style, and are constructed of the native grey stone with white terra cotta ornament. Built around a central plaza, they form one of the city's most attractive architectural groups.

Immediately south of the Hygiene Building is the Stadium. This structure, which was erected in 1913-1915 and dedicated on May 29 of the latter year, is the gift of Mr. Adolph Lewisohn. It was planned not only to promote physical training and athletics in the College, but also for occasional public assemblies under the auspices of the City. It occupies the plot of ground bounded by One Hundred and Thirty-sixth and One Hundred and Thirty-eighth Streets and Amsterdam and Convent Avenues. The City transferred the land from the Park Department to the College, and Mr. Lewisohn's public-spirited generosity provided the great semi-elliptical seating structure in the classic style which encloses the western side, rising with the natural contour of the hill. The seating capacity is about six thousand, with standing room for fifteen hundred more. The athletic field contains a baseball diamond, a football field, a running track a fifth of a mile long, a four-hundred-foot straight-away course, and provision for other sports.

The Commerce Building is the original building of the College at Twenty-third Street and Lexington Avenue, designed by James Renwick in 1847, which now accommodates some of the work of the School of Business and Civic Administration. Nearly all the special and advanced professional courses in business subjects are offered in this building in the Evening Session, because the place is convenient

for persons employed by day in Manhattan and living in any of the five boroughs.

Some of the courses in the School of Business and Civic Administration, primarily for the benefit of government employees, are conducted in rooms provided for this purpose by the City in the Municipal Building, at Chambers and Centre Streets.

The Brooklyn Branch of the Evening Session of the College is at present conducted in the Boys' High School building, at the corner of Marcy and Putnam Avenues.

Organization. The College of the City of New York includes the College of Liberal Arts and Science, the School of Technology, the School of Business and Civic Administration, and the School of Education. Both day and evening sessions are held, and an eight weeks Summer Session. The College conducts, in addition, a Preparatory High School.

College of Liberal Arts and Science. The College offers three general courses of study leading to baccalaureate degrees. These courses are designed to give a liberal and thorough collegiate training as a basis for a sound general culture, and also to permit, in the upper classes, a considerable specialization of study in the direction of a student's chosen life work.

The College of Liberal Arts and Science has no organized graduate department, though many college graduates, as special students, avail themselves of its facilities for higher work. The student, however, who plans to continue professional study in one of the coordinate Schools can so arrange his work that it will meet the requirements for a bachelor's degree in the College at the end of four years and make possible a professional degree after one more year of study.

For the student who contemplates professional study in schools of medicine, law, theology, or applied sciences and arts, the College furnishes the general training required by the best professional schools as prerequisite; and the opportunities which the curriculum offers for specialization may be used in many cases to shorten the later period of professional training. For all its students, the College aims at the enrichment of life through the enlargement of intellectual interests and the promotion of desirable habits of thought and action.

School of Technology. Certain courses in engineering subjects have for many years been given in the College. In 1916 the Board of Trustees authorized, in the Division of Vocational Subjects and Civic Administration, in the Evening Session, a curriculum leading to the Diploma of Junior Civil Engineer. In 1917 the Trustees established more extensive courses in chemical, civil, electrical, and mechanical engineering which were based on the required work in the natural science curriculum of the College of Liberal Arts and Science. These Engineering Courses were organized, by vote of the

Board of Trustees in June, 1919, into the School of Technology, with a separate Dean and Faculty.

The technical courses of study in this School include approximately three years of work, so that each combined curriculum of about two years of collegiate required work and the technical or engineering work covers five years. They lead to the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer, respectively.

School of Business and Civic Administration. The first course of study at the College leading to a diploma in the field of business was established as part of the Division of Vocational Subjects and Civic Administration in September, 1916. This was the curriculum leading to the Diploma of Graduate in Accountancy. In June, 1919, the Trustees of the College organized all the courses in accountancy and other courses connected with business and administrative work as a distinct School of Business and Civic Administration, with a separate Dean and Faculty.

The School is organized not only to give specific and professional training in various aspects of modern business, but also to impart a broad understanding of the inter-relation of individuals, business enterprises, and the government, as they play their parts in modern civilization. Having in mind the fact that the preparation for enlightened, efficient and patriotic service in the field of business must be as thorough as that for service in law, medicine, theology, pedagogy and applied science (and possibly even broader), the School bases its technical business instruction upon very liberal, general education. The courses of study lead to the degrees of Master of Business Administration and Bachelor of Business Administration, the professional Diploma of Graduate in Accountancy, and the Certificate of Junior Accountant. Numerous special courses to meet particular needs of people in business are also offered.

The five-year course leading to the Master's degree is made up of two distinguishable parts, the required work of any one of the courses in the College of Liberal Arts and Science, and specialized work chiefly in the junior, senior, and post-graduate years. A student who has complied with the entrance requirements of the College of Liberal Arts and Science may so arrange his course as to receive the degree of Bachelor of Arts, Bachelor of Science, or Bachelor of Science in Social Science at the end of the fourth year, and that of Master of Business Administration at the end of the fifth.

The curriculum leading to the degree of Bachelor of Business Administration is offered primarily to students who are employed during the day and who attend College at night. It includes both professional and liberal studies; its extent is one hundred and twenty semester hours. The curriculum leading to the Diploma of Graduate in Accountancy may be completed by three years of evening study

and is adequate preparation for persons expecting to pass the State examination for Certified Public Accountants. A shorter professional course leads to the Certificate of Junior Accountant in private or public service.

School of Education. The Division of Extension Courses for Teachers was established in 1908, and afterward further extended to include also courses for librarians and social workers. The work of the Division was designed especially to qualify these groups of students in the City's service both for increased effectiveness in their positions and for professional advancement. The number and scope of the courses were steadily increased to keep up with the large enrolment; in 1917 college credit was granted for those which were of collegiate grade; and in January, 1921, the Board of Trustees established the School of Education, with a separate Faculty, to conduct both undergraduate and graduate courses and confer degrees and certificates.

The School conducts most of the work of the department of Education, with the courses formerly organized in the Extension Division, certain courses given by other departments, and the Educational Clinic. It aims to meet the needs of undergraduate students in the College who wish to prepare themselves for the profession of teaching, and of teachers in recognized schools who are graduates of a recognized normal course and wish to qualify for the bachelor's degree, and also of graduate students. It offers curricula leading to the degree of Bachelor of Science in Education and to that of Master of Science in Education. It also confers special professional certificates upon the completion of limited groups of related courses.

Many of the courses are given for the especial convenience of teachers in the hours of the late afternoon and Saturday morning. Some are given at the college buildings; others at various centers in the different boroughs of the City. Certain of them are given in cooperation with the Bureau of Lectures of the Board of Education, with teachers' organizations and other educational agencies of the City and State.

Evening Session. The Evening Session of the College, which was established in 1909, makes it possible for persons who are otherwise employed during the day to pursue college courses at night. The professors and instructors are appointed from the regular College staff; the requirements for admission and the courses, credits, and discipline are substantially the same as those of the day session. Since their hours available for college work are fewer, evening students are not permitted to take so many courses each term as are taken by day students; consequently the number of years required to attain a degree is greater in the evening than in the day session. It varies according to the capacity of the student.

In accordance with a resolution of the Board of Trustees adopted

in December, 1917, the Evening Session of the College now admits women as students. (See page 47.)

Summer Session. The Summer Session was established in 1917 as a war emergency measure. It is continued as a permanent added session in which selected courses from the various curricula in any of the schools of the College are offered to aid students eager to economize time in securing a degree. Special vocational courses and teachers' courses are also included.

The Summer Session is conducted for eight weeks in July and August, one-half the duration of a regular semester. Each course is given for twice the number of hours per week allowed to it during the academic year. The teaching staff is selected from the officers of instruction in the College and its Schools, with additions from other institutions and from professional practice.

Preparatory High School. The Preparatory School conducted by the College affords boys of the City who have finished their course in the elementary schools an opportunity to make their preparation for college under the direction of the College itself. The time required to complete this preparation depends upon the capacity of each student. The schedule of recitations, however, is so arranged as to permit students of more than average ability and diligence to complete the course in three years. The School occupies Townsend Harris Hall, and is used as an observation school by the Department of Education of the College.

THE COLLEGE OF LIBERAL ARTS AND SCIENCE

FACULTY AND INSTRUCTING STAFF

Arranged by Departments

SIDNEY EDWARD MEZES, Ph.D., LL.D., *President*
CARLETON L. BROWNSON, Ph.D., *Dean*
FREDERICK G. REYNOLDS, LL.B., Sc.D., *Secretary*

ART

LEIGH HARRISON HUNT, M.S., M.D.,	*Professor*
ENGELBERT NEUS, A.M.,	*Associate Professor*
GEORGE C. AUTENRIETH, A.M.,	*Associate Professor*
J. REDDING KELLY,	*Assistant Professor*
ABRAM G. SCHULMAN, A.B.,	*Assistant Professor*
WILLIAM H. HASKELL,	*Instructor*
ROBERT BRUCE MACDOUGALL,	*Instructor*
LOUIS WOLCHONOK, B.S.,	*Instructor*[1]

BIOLOGY

GEORGE G. SCOTT, Ph.D.,	*Associate Professor*
ABRAHAM J. GOLDFARB, Ph.D.,	*Assistant Professor*
WILLIAM WARD BROWNE, Ph.D.,	*Assistant Professor*
EARL ALBERT MARTIN, A.M.,	*Assistant Professor*
HERBERT RUCKES, A.M.,	*Instructor*
JOSEPH TULGAN, A.M.,	*Tutor*
ALEXANDER GROSS,	*Fellow*
SAMUEL RIFKIN,	*Fellow*

CHEMISTRY

CHARLES BASKERVILLE, Ph.D., F.C.S.,	*Professor*
HERBERT R. MOODY, Ph.D.,	*Professor*
RESTON STEVENSON, Ph.D.,	*Associate Professor*
WILLIAM L. PRAGER, Ph.D.,	*Associate Professor*
LOUIS J. CURTMAN, Ph.D.,	*Assistant Professor*
ROBERT W. CURTIS, Ph.D.,	*Assistant Professor*
WILLIAM L. ESTABROOKE, Ph.D.,	*Assistant Professor*
ARTHUR SCHUTT,	*Instructor*
WALTER H. PEARCE,	*Special Instructor*
JOSEPH A. BABOR, A.M.,	*Instructor*
MARTIN MEYER, B.S.,	*Instructor*
MAX MELTSNER, M.S.,	*Tutor*
WILLIAM B. JONES,	*Special Tutor*
DAVID HART, B.S.,	*Tutor*
ALEXANDER LEHRMAN, A.M.,	*Tutor*
JOHN E. BROLLES, JR., B.S.,	*Tutor*
SIDNEY LIEBGOLD,	*Clerical Assistant*
MOSES CHERTCOFF, B.S.,	*Fellow*
FOSTER DEE SNELL, B.S.,	*Fellow*
HARRY PETER COATS, A.M.,	*Fellow*
LOUIS THUOR, B.S.,	*Fellow*
HENRY K. MILLER, A.M.,	*Fellow*
JAMES FREDERICK WHITE, A.B.,	*Fellow*
GEORGE HUGH WALLACE, B.S.,	*Fellow*
LEO LEHRMAN, B.S.,	*Fellow*
FREDERIC LUDWIG WEBER, B.S.,	*Fellow*[1]

[1]In the Evening Session.

CLASSICAL LANGUAGES AND LITERATURES

Carleton L. Brownson, Ph.D.,	*Professor*
August Rupp, A.B.,	*Associate Professor*
Allan P. Ball, Ph.D.,	*Associate Professor*
[1]Mario Emilio Cosenza, Ph.D.,	*Associate Professor*
Edmund Burke, A.B.,	*Associate Professor*
Carroll N. Brown, Ph.D.,	*Associate Professor*
[1]Emory B. Lease, Ph.D.,	*Associate Professor*

ECONOMICS

Frederick B. Robinson, Ph.D.,	*Professor*
Guy Edward Snider, Ph.D.,	*Associate Professor*
Lynn Mateer Saxton, Pd.D., C.P.A.,	*Assistant Professor*
George Monroe Brett, A.B.,	*Assistant Professor*
Thomas P. Kelly, A.M.,	*Lecturer*[2]
Morton Gottschall, A.B., J.D.,	*Instructor*
Arthur E. Albrecht, M.A.,	*Instructor*
Alexander L. Pugh, B.S. in Econ.,	*Instructor*[2]
John R. B. Byers, M.S.,	*Instructor*
David Berk, B.S.,	*Instructor*[2]
Benjamin L. Blau, B.S.,	*Instructor*[2]
A. L. Wilbert, M.A.,	*Special Instructor*[2]
William A. Patterson, A.M.,	*Special Instructor*[2]
John M. Connolly, A.B.,	*Tutor*[2]
John Horace Mariano, Ph.D.,	*Tutor*[2]
Robert E. Olmsted, B. S. in Econ.,	*Tutor*[2]
Lawrence B. Mann, A.B.,	*Tutor*[2]

EDUCATION

Paul Klapper, Ph.D.,	*Professor*
Samuel B. Heckman, Ph.D.,	*Associate Professor*
[3]James Robert White, Ph.D.,	*Assistant Professor*
Egbert M. Turner, A.M.,	*Instructor*
Philip W. L. Cox, A.M.,	*Instructor*

ENGINEERING

Frederick Skene, B.S., C.E.,	*Professor*
Alfred N. Goldsmith, Ph.D.,	*Associate Professor*
Arthur Bruckner, B.S., M.E.,	*Assistant Professor*
Frederic O. X. McLoughlin, A.M., C.E.,	*Assistant Professor*

ENGLISH

Lewis Freeman Mott, Ph.D.,	*Professor*
Harry C. Krowl, Ph.D.,	*Professor*
Charles F. Horne, Ph.D.,	*Associate Professor*
Alexis I. du Pont Coleman, A.M.,	*Associate Professor*
Earle Fenton Palmer, Ph.D.,	*Associate Professor*
Alfred D. Compton, B.S.,	*Assistant Professor*
Joseph Vincent Crowne, Ph.D.,	*Assistant Professor*
William Bradley Otis, Ph.D.,	*Assistant Professor*
Felix Grendon, Ph.D.,	*Assistant Professor*
Donald G. Whiteside, A.M.,	*Assistant Professor*
Bird Stair, M.S.,	*Assistant Professor*
Thomas Gaffney Taaffe, Ph.D.,	*Instructor*
Jarvis Keiley, A.M.,	*Instructor*

[1]Relieved of duty in the College of Liberal Arts and Science.
[2]In the Evening Session.
[3]Absent on leave.

GEOLOGY

Ivin Sickels, M.S., M.D.,	*Professor*
Bertram T. Butler, A.M.,	*Instructor*

GERMAN

Camillo von Klenze, Ph.D.,	*Professor*
Henry G. Kost, B.S.,	*Assistant Professor*
Carl W. Kinkeldey, Ph.D.,	*Instructor*

GOVERNMENT AND SOCIOLOGY

Stephen Pierce Duggan, Ph.D.,	*Professor*
William B. Guthrie, Ph.D.,	*Associate Professor*
Stanley M. Brown, A.B.,	*Tutor*[1]

HISTORY

Nelson P. Mead, Ph.D.,	*Professor*
Holland Thompson, Ph.D.,	*Professor*
J. Salwyn Schapiro, Ph.D.,	*Professor*
Livingston Rowe Schuyler, S.T.B., Ph.D.,	*Associate Professor*
Thomas R. Moore, Ph.D.,	*Associate Professor*
Livingston Burrill Morse, B.S.,	*Assistant Professor*
Austin Baxter Keep, Ph.D.,	*Assistant Professor*
Morton Gottschall, A.B., J.D.,	*Instructor*
William J. Norton, Jr., B.S.,	*Tutor*[1]
Samuel Bernstein,	*Fellow*

HYGIENE

Thomas Andrew Storey, Ph.D., M.D.,	*Professor*
Frederic A. Woll, Ph.D.,	*Associate Professor*
Herbert Miles Holton, B.S.,	*Assistant Professor*
Walter Williamson, B.A.,	*Assistant Professor*
Lionel B. McKenzie,	*Special Instructor*
Richard J. O'Neil,	*Instructor*
Canute Hansen, D.D.S.,	*Instructor*
Radford J. McCormick,	*Instructor*
Nathan Holman,	*Special Instructor*
John James Dailey,	*Special Instructor*
Walter Scott Heard, D.D.S.,	*Instructor*
Berton Lattin, A.B., M.D.,	*Instructor*
Raymond Forrest Purcell,	*Instructor*
Frank W. Wheeler,	*Instructor*
Oswald La Rotonda, M.D.,	*Tutor*
Jack E. Rider,	*Tutor*
George H. Schmidt, A.B.,	*Tutor*
Robert Alan Ambler, A.B.,	*Tutor*
Samuel E. Cantor,	*Tutor*
Joseph A. O'Conor, M.D.,	*Tutor*
Harry Thaler, D.D.S.,	*Tutor*
Harry H. Haas,	*Tutor*
Harry Karlin,	*Fellow*
Alfred D. Reutershan,	*Fellow*

MATHEMATICS

Paul Saurel, D.Sc.,	*Professor*
Frederick G. Reynolds, LL.B., Sc.D.,	*Professor*
Joseph Allen, A.M.,	*Associate Professor*

[1]In the Evening Session.

Frederick M. Pedersen, E.E., Sc.D.,	*Associate Professor*
Arthur B. Turner, Ph.D.,	*Assistant Professor*
Maximilian Philip, Sc.D., C.P.A.,	*Assistant Professor*
Edward E. Whitford, Ph.D.,	*Assistant Professor*
Paul H. Linehan, Ph.D.,	*Assistant Professor*
Warren G. Hubert, Sc.D.,	*Assistant Professor*
Rorert F. Smith, M.S.,	*Assistant Professor*
John Alfred Brewster, A.B.,	*Assistant Professor*
Alva Turner, B.S.,	*Tutor*
Arthur King Doolittle, B.S.,	*Tutor*

MILITARY SCIENCE AND TACTICS

Samuel B. Arnold, Col., Ret., U. S. A.,	*Professor*
Herbert S. Whipple, Major, Ret., U. S. A.,	*Associate Professor*
Charles Curtis Herrick, Major, U. S. A.,	*Associate Professor*
Richard M. Winfield,	*Captain, U. S. A.*
David Francis Finnerty,	*First Lieutenant, U. S. A.*
Newton Nevada Jacobs,	*First Lieutenant, U. S. A.*

MUSIC

Samuel A. Baldwin, F.A.G.O.,	*Professor*

PHILOSOPHY

Harry Allen Overstreet, B.Sc. (Oxon.),	*Professor*
Morris Raphael Cohen, Ph.D.,	*Professor*
John Pickett Turner, Ph.D.,	*Associate Professor*
Howard D. Marsh, Ph.D.,	*Assistant Professor*

PHYSICS

William Fox, B.S., M.E.,	*Professor*
Charles A. Corcoran, A.M.,	*Assistant Professor*
Leighton B. Morse, Ph.D.,	*Assistant Professor*
Roy Fisher Leighton, M.S.,	*Instructor*
Alexander Marcus, B.S.,	*Instructor*
Robert Dressler,	*Instructor*
Joseph William Hayward, M.Sc.,	*Instructor*
Abraham M. Goldstein, B.S.,	*Tutor*
Mark Waldo Zemansky, B.S.,	*Tutor*
Henry Bredekamp,	*Laboratory Assistant*
Henry Semat,	*Fellow*

PUBLIC SPEAKING

Erastus Palmer, A.M.,	*Professor*
Daniel W. Redmond, Ph.D.,	*Associate Professor*
Joseph A. Mosher, Ph.D.,	*Assistant Professor*
Robert H. Hatch,	*Instructor*
Gustav F. Schulz, A.M.,	*Instructor*
Joseph X. Healy, A.M., LL.B.,	*Instructor*
Thomas E. Coulton, A.M.,	*Instructor*

ROMANCE LANGUAGES

Charles A. Downer, Ph.D.,	*Professor*
Victor Emmanuel François, Ph.D.,	*Associate Professor*
Ventura Fuentes, A.B., M.D.,	*Associate Professor*
Gaston A. Laffargue, B-ès-L.,	*Associate Professor*
Felix Weill, L-ès-L.,	*Associate Professor*
Americo Ulysses N. Camera, Ph.D.,	*Assistant Professor*
Alfred G. Panaroni, B.S.,	*Assistant Professor*
William E. Knickerbocker, Ph.D.,	*Instructor*

Alfonso Arbib-Costa, Dipl.,	*Instructor*
Maxime L. Bergeron, Ph.D.,	*Instructor*
Alfred Iacuzzi, A.M.,	*Tutor*[1]

STANDING COMMITTEES

Course and Standing: Professors Mott, Brownson, Thompson, Moody, and Redmond.

Curriculum: Professors Mott, Downer, Baskerville, Brownson, Robinson, Reynolds, Mead, Klapper, J. P. Turner, and Scott.

Non-Matriculated Students: Professors Skene, Robinson, and Duggan.

[1]In the Evening Session.

ADMISSION

For admission to the freshman class of the College a candidate must offer evidence of preparation in at least fifteen units of secondary school work. A unit means the satisfactory completion of a year's work with recitations at least four or five periods a week requiring preparation, or equivalent school work in a subject not requiring preparation.

Of these fifteen units, eleven and a half are required to be in the following subjects, as they are described below:

English	3 units
History	1 unit
Foreign languages	5 units
Mathematics	2½ units

The three units in **English** represent the amount of work in that subject usually completed in four years in a recognized preparatory school.

The requirement in foreign languages may be met by presenting any two of the following: **French, German, Greek, Italian, Latin, Spanish.** Three years of one are required and two years of another, but to conform to the curriculum leading to the degree of Bachelor of Arts three years of Latin should be presented[1] and two years of one of the other languages; and to conform to the curriculum leading to the degree of Bachelor of Science or Bachelor of Science in Social Science, at least one modern language.

The one unit required in **history** must include two of the following divisions of the subject, at least a half unit of each: (a) ancient history, (b) mediaeval and modern history, (c) English history, (d) American history and civics.

The two and a half units required in **mathematics** are of elementary and intermediate algebra and plane geometry.

The remainder of the fifteen units required for admission, in addition to the foregoing eleven and a half, may be chosen from the following list of **elective subjects:**

Additional language, one or two years.....1 or 2 units

Mathematics—

Advanced algebra	½ unit
Solid geometry	½ unit
Trigonometry	½ unit

[1]For the adjustment in the case of a student admitted to the Arts curriculum with less than two years of preparatory Latin, see page 49.

History ..... ½ to 2 units
Drawing (according to the number of hours) ..... ½ or 1 unit
Shopwork (according to the number of hours) ..... ½ or 1 unit
Elementary physics ..... 1 unit
Elementary chemistry ..... 1 unit
Elementary biology ..... 1 unit
Advanced botany ..... 1 unit
Advanced zoology ..... 1 unit
Hygiene ..... ½ unit
Community civics ..... ½ unit
Physiography ..... 1 unit

It is advised that prospective candidates for the degree of Bachelor of Science should complete solid geometry, trigonometry, advanced algebra, and elementary physics while at the preparatory school and present them among the elective subjects for admission.

Admission with Conditions or Advanced Standing

A candidate who presents only fourteen or fourteen and a half units of preparation may, in the discretion of the Committee on Admission, be admitted to the freshman class, provided, however, that he must completely satisfy the entrance requirements within one year from the date of his admission, unless an extension of time be granted by the Committee on Course and Standing.

A candidate who presents the full number of entrance units and who lacks not more than two units in the list of subjects specifically required, may, in the discretion of the Committee on Admission, be admitted to the freshman class, but must completely satisfy the entrance requirements within one year from the date of his admission, unless an extension of time be granted by the Committee on Course and Standing.

Credit will be given for advanced standing in any subject, when the work so presented at admission is of equivalent college grade and is in excess of the necessary number of entrance units; but no credit can be granted at admission for any part of the work of the senior year.

Methods of Admission

Evidence of the units of preparation required for admission may be given in any of the following ways:

1. By presenting certificates from the New York City high schools or other accepted schools.

   Blank forms for this purpose may be obtained from the Committee on Admission and should be filled out by the school authorities and sent to the Committee.

2. By presenting a college entrance diploma issued by the New York State Education Department.

3. By presenting certificates of the College Entrance Examination Board.

Credentials such as are indicated above are accepted only so far as they cover specifically subjects which are given in the foregoing list of admission requirements.

4. By passing the entrance examinations of the College or the graduation examinations of its Preparatory School in Townsend Harris Hall.

Entrance examinations are held at the College in January, in June, and in September. Application for permission to take entrance examinations should be made at least two weeks in advance. The dates may be ascertained by addressing the Committee on Admission.

A candidate may take examinations in some subjects at one time and in others at other times; but he may not present himself for the entrance examinations more than four successive times, except by special consent of the Committee on Admission. The results of these entrance examinations may stand to the credit of the candidate for the period of a year and a half, but no longer.

Special Students

Men who are not candidates for a degree may be enrolled in the College as special students and admitted to particular courses which they desire, under certain limitations of the privilege.

In the day session of the College such students must be men of at least twenty-one years of age, and must give satisfactory evidence to the heads of the departments in which they wish to study that they are fully equipped to pursue the work of the courses chosen. If they meet in full the requirements for admission to the freshman class, they may enter College as matriculated students without the payment of fees (except in courses for which fees are regularly charged); if they do not meet the regular requirements for admission, they may be admitted without matriculation to particular courses, under the supervision of the Faculty Committee on Non-matriculated Students, to which they must show their sufficient preparation for the courses which they wish to pursue.

For a statement as to fees which are to be paid by non-matriculated and non-resident students, see page 90.

Non-matriculated Students in the Evening Session. Any mature resident of the City of New York, of either sex, who can profit by the work, may be admitted to particular courses in the Evening Session as a non-matriculated student, upon the payment of the required fees, and may receive certificates of work in particular courses.

The Admission of Women to the Evening and Summer Sessions

Women who meet all the scholastic requirements for college entrance and are therefore qualified to matriculate as regular students

of the Evening Session of the College and the Summer Session are admitted to the courses offered in those sessions on the same terms as similarly qualified male students.

The President of the College, however, has entered into an arrangement with the President of Hunter College which provides, in general, that matriculated women students who can attend the Hunter College Evening Session as conveniently as they can attend that of the College of the City of New York must pursue at Hunter College courses available at both places, but may pursue courses offered only at the College of the City of New York if a schedule including them is approved by the Hunter authorities. Students who would clearly be inconvenienced by being required to attend Hunter College may enroll directly for work at the College of the City of New York. No Hunter College undergraduate will be admitted to a City College Summer Session without the written approval of Hunter College.

Furthermore, under this arrangement, women students who are candidates for the regular academic degrees will matriculate at Hunter College, which will confer those degrees. This arrangement, however, does not affect the conferring of technical degrees and special certificates or diplomas.

COURSES OF STUDY

The College of Liberal Arts and Science offers three curricula or courses of study leading respectively to the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Science in Social Science. These are designed to meet the requirements of liberal education. They are also planned to afford the student in the upper college years an opportunity to follow a well-defined group of subjects leading toward a definitely chosen life-work, to furnish him, in some departments, with special professional training, and to extend his culture in the direction of his personal intellectual interests.

With these ends in view, the four-year curricula have been divided into two nearly equal parts, the earlier portion consisting mainly of prescribed work and the later portion consisting mainly of elective work. It is expected that the candidate for a degree will complete the prescribed work before taking up elective courses, except four credits of work in the department of Public Speaking, which are regularly to be taken in the last two years.

The total number of credits required for graduation is one hundred and thirty-four, a little more than half of which are for prescribed work. A credit is defined as normally representing work that calls for two and a half hours per week per term of a student's time in prescribed courses, or three hours in elective courses.

PRESCRIBED WORK

The prescribed work in the curriculum leading to the degree of **Bachelor of Arts** includes the following courses:

Biology 1	4	credits
Chemistry 1 and 2	6	"
Economics 1	3	"
English 1, 2, and 3	6	"
Government and Sociology 1	3	"
History 1 and 2	7	"
Hygiene 1, 2, 3, and 4	4	"
Latin 1, 2, 3, and 4	14	"
A second language	14	"
(French, German, Greek, or Spanish, 1-4)		

These requirements are based upon the assumption that the student has presented three units of preparation in Latin at entrance to College. A student, however, who is admitted to the Arts course with less than two units of Latin will be required to complete in College only three years of Latin, including both preparatory and college work, five hours a week through two years (see page 118) and four hours a week through a third year; but if the total amount of work in Latin thus completed shall fall short of four years the amount of such shortage shall be added to the normal requirement in the second language. The second language should be one of the languages presented for admission.

A third language, courses 41 and 42, or Comparative Literature and Art (English 41 and 42)	6	credits
Mathematics 2 (*Trigonometry) and either 3 (*Advanced Algebra) or 41	6	"

*If not presented for admission.

Military Science 1, 2, 3, and 4	4	"
Philosophy 1	3	"
Physics 1 and 2	6	"

If elementary physics is not presented for admission.

Public Speaking 1-8	8	"

The prescribed work in the curriculum leading to the degree of **Bachelor of Science** is as follows:

Art 1-2	4	credits
Biology 1	4	"
Chemistry 1, 2, and 3	9	"
Economics 1	3	"
English 1, 2, and 3	6	"
French 1 and 2, or 3 and 4, or German 1 and 2, 7 and 8, or 3 and 4, or Spanish 1 and 2, or 3 and 4	7	"

The language chosen should be one of those presented for admission.

Geology 1	3	credits
Government and Sociology 1	3	"
History 1 and 2	7	"
Hygiene 1, 2, 3, and 4	4	"
Mathematics 1 (*Solid Geometry), 2 (*Trigonometry), and 3 (*Advanced Algebra)	9	"
and 4 and 5	10	"

* If not presented for admission.

Military Science, 1, 2, 3, and 4	4	"
Philosophy 1	3	"
Physics *1 and *2	6	"
and 3, 4, 5, and 6	6	"

* If elementary physics is not presented for admission.

Public Speaking 1-8	8	"

The prescribed work in the curriculum leading to the degree of **Bachelor of Science in Social Science** is as follows :

Biology 1	4	credits
Chemistry 1 and 2	6	"
Economics 1 and 2	6	"
English 1, 2, and 3	6	"
French 1 and 2, or 3 and 4, or German 1 and 2, or 3 and 4, or Spanish 1 and 2, or 3 and 4	7	"

The language chosen should be one of those presented for admission.

Government and Sociology 1 and 5	6	"
History 1, 2, 3, and 4	12	"
Hygiene 1, 2, 3, and 4	4	"
Mathematics 6 (*Solid Geometry and *Trigonometry)	4	"
and 7	4	"

* If not presented for admission.

Military Science 1, 2, 3, and 4	4	"
Philosophy 1, 2 or 3, and 5	9	"
Physics *1 and *2	6	"
and 3 and 4	4	"

* If elementary physics is not presented for admission.

Public Speaking 1-8	8	"

The amount of prescribed work in the foregoing lists may be diminished in the case of students who present more than the required number of units for admission, if the excess represents work of college grade accepted for advanced standing in the required subjects.

Credit given in English and in Public Speaking is subject to the

following regulation, in accordance with which one-half credit is reserved in each of these departments until graduation:

> The head of any department of the College who finds a student deficient in written or spoken English is required to report that fact to the Head of the Department of English Language and Literature or to the Head of the Department of Public Speaking, as the case may require, and the student so reported shall be required to submit to such tests and to such subjects or courses of study as shall satisfy the head of the department who shall have reported the deficiency, that the same has been removed.

Military Science and Tactics

A unit of the Reserve Officers' Training Corps has been established at the College, and the War Department has detailed a commissioned officer of the United States Army to serve as Professor of Military Science and Tactics. Military Training is prescribed for all able-bodied students through the first four terms of their attendance at the College.

ELECTIVE WORK

The remaining credits required for a liberal degree, in addition to those particularly prescribed, are elective, under restrictions which oblige a certain concentration but which permit beyond that either a wide distribution or further specialization, as the individual student may choose. For these purposes, the college departments, with two exceptions, have been grouped in three Divisions, as follows:

The Division of Language and Literature, including Art, Classical Languages, English, German, Public Speaking, and Romance Languages.

Chairman, Professor Fuentes
Secretary, Professor Mosher

The Division of Social Science, including Economics, Government and Sociology, History, and Philosophy.

Chairman, Professor Guthrie
Secretary, Professor Saxton

The Division of Natural Science, including Art (for the work in descriptive geometry and mechanical drawing), Biology, Chemistry, Engineering, Geology, Hygiene, Mathematics, and Physics.

Chairman, Professor Sickels
Secretary, Professor Reynolds

At the end of the sophomore year each student is asked to decide in which of these divisions he desires to pursue his major work for the remainder of his college course. In the division chosen he will be required to take at least one-half of his elective credits and at least twelve credits of this number in one department of the division so selected. The other half of the elective credits may be taken in any department or departments of the College, including with those

named in the above divisions the departments of Education and Music.

Students are recommended to consult with the chairmen of the divisions and with the heads of departments when about to make their elections. It cannot be too strongly urged that when, at the end of the sophomore year, a student begins to make his elections, he should plan not merely for the first junior term but also for all the terms before him until graduation. The student who, as the result of his high school preparation and the prescribed work of the first two college years, comes to the choice of his elective work with full consciousness of his capacities and limitations, should be able to decide as to the general direction of his future study. If he has definitely decided upon his particular work, a judicious choice of elective courses, covering the period of the last two years in college, may be made to assist him very much in preparing himself for it, while increasing the satisfaction of his own intellectual aptitudes. Such a choice may also be directed to the shortening of the required period of attendance in professional and other post-graduate schools.

"Pre-Medical Course"

Students desiring to enter a medical school with the minimum of preparation are required at present to complete two years of college work, including one and one-half years of Chemistry (Inorganic and Organic) and one year each of Physics, Biology and English. These conditions may be met satisfactorily by students pursuing the regularly prescribed subjects of the Science curriculum, who in addition are permitted to elect one course in Biology (either 22 or 23) and two courses in Chemistry (4 and 50). The privilege of electing these courses in Biology and Chemistry is known as the "pre-medical privilege," and is extended only to those students who maintain an average grade of C throughout each term.

Additional courses in biology, chemistry and hygiene may be taken only in the junior and senior years. Students are strongly urged, therefore, if they desire to obtain an adequate preparation for the study of medicine, to take the full college course.

SCHOLARSHIP REQUIREMENTS AND ACADEMIC STANDING

The result of a student's work in every subject of study, whether prescribed or elective, shall be marked and expressed by a single final grade indicated by one of the six letters, A, B, C, D, E, or F, corresponding, respectively, to percentages in the nineties, eighties, seventies, sixties, fifties and those below fifty. A, B, C, and D are *passing* grades for which students are credited with the number of counts belonging to the particular subject. A signifies *exceptional ex-*

cellence; B *very good* work; C *fairly good* work of the ordinary type; D merely a *passing* mark; E a *condition;* and F a *failure.*

In estimating the counts for registration and graduation, a student receiving four credits with grade A shall, for every such four credits, have an *extra* credit point. Similarly for every eight credits received with grade B. For every eight credits received with grade D, one credit shall be *deducted.*

Whenever a student has obtained eighty original credits with grade D, no further credits shall be allowed him for work done with a grade less than C.

A student receiving a grade F in a prescribed course shall repeat that course.

A student receiving the grade E in any course is conditioned in that course; but is not thereby precluded from continuing his work in the department, except under the following provisions:

(*a*) No student is allowed more than two conditions in the work of any one term; and each additional grade E shall be rated as an F.

(*b*) Any student who has received the grade F in more than one course at the end of a term shall not be allowed more than one condition; and if he has received F in more than two courses, he shall not be allowed any condition. In such cases the additional courses reported E shall be rated F.

Examinations for the removal of conditions received in January or June shall be held on a day during the spring or fall term, respectively, to be fixed by the President.

A condition is to be removed by satisfactory work or by re-examinations, as follows:

(*a*) If the course in which the condition is incurred be announced as prerequisite to a subsequent course in the same department, the student shall be allowed to pursue the subsequent course; and, if his work in the latter be satisfactory, the department may, at the time set for the re-examination, assign him the grade D in the prerequisite course, without requiring him to pass the re-examination.

(*b*) Otherwise a student may remove his condition or conditions at the re-examinations. Conditions so removed shall receive a grade not higher than C.

(*c*) A student who fails to pass the re-examination set for the removal of a particular condition shall have no further opportunity to remove it and shall receive the grade F for the course.

A student whose record at the close of a term is exceedingly poor, whether because of the number of failures or conditions incurred or

because of repeated failure or condition in one course, may without preliminary warning be dismissed from college.

A student whose record at the close of the first half of a term in any course or courses is exceedingly poor, may without preliminary warning be dropped from the roll in such course or courses.

Students are expected to attend every college exercise for which their courses provide. Frequent absence or unsatisfactory work due to absence may be followed by exclusion from particular courses or by suspension.

Students late for any college period may be excluded from the room and marked absent.

A student who is absent from the final examination (whether oral or written) in any course, receives the grade F for the course. A special examination in such case may be granted only by the Faculty Committee on Course and Standing, and will be granted by that committee only upon the submission of written evidence showing that a student was physically unable to be present at the stated examination.

No student in the College shall be permitted to take more than 17½ credits during any term unless he has had during the preceding term an average grade B and has not fallen below C in any subject; and such a student shall not be allowed to take more than 17½ credits except by permission of the Committee on Course and Standing.

The requirement for enrolment in a class is as follows:

For Upper Freshman	13	credits
" Lower Sophomore	30	"
" Upper Sophomore	48	"
" Lower Junior	65	"
" Upper Junior	83	"
" Lower Senior	100	"
" Upper Senior	117	"
" Graduation	134	"

No student, however, shall be enrolled as a sophomore until he has removed all entrance conditions, and any student who is at any time carrying a sufficient number of credits to complete the total required for graduation shall be registered as an upper senior.

A student shall not be graduated until he has received all the credits prescribed, and until all his indebtedness to the College has been discharged.

Honors

Second Year. At the close of the second year there shall be three grades of honors:

Highest second year honors shall be given for the grade A in prescribed courses counting at least 50 credits, with the remaining grades B.

High second year honors shall be given for the grade A in prescribed courses counting at least 30 credits, with the remaining grades B.

Honors shall be given for the grades A and B in prescribed courses counting at least 55 credits.

Graduation. At graduation there shall be three grades of honors:

A degree *summa cum laude* shall be granted to those students who have received the grade A in courses counting at least 115 credits, with the remaining grades all B.

A degree *magna cum laude* shall be granted to those students who have received the grade A in courses counting at least 64 credits, with the remaining grades all B.

A degree *cum laude* shall be granted to those students who have received the grades A and B in courses counting at least 120 credits.

Phi Beta Kappa

Such members of the graduating class of the College of the City of New York as have distinguished themselves by scholarship, manliness, and integrity, may be elected to membership in the Gamma Chapter of Phi Beta Kappa upon proposal by the Committee on Admission.

THE SCHOOL OF TECHNOLOGY

FACULTY AND INSTRUCTING STAFF

Arranged by Departments

SIDNEY EDWARD MEZES, Ph.D., LL.D., *President*
FREDERICK SKENE, B.S., C.E., *Dean*
FREDERIC O. X. McLOUGHLIN, C.E., A.M., *Secretary*

ART

LEIGH HARRISON HUNT, M.S., M.D.,	*Professor*
ENGELBERT NEUS, A.M.,	*Associate Professor*
GEORGE C. AUTENRIETH, A.M.,	*Associate Professor*

BIOLOGY

GEORGE G. SCOTT, Ph.D.,	*Associate Professor*
WILLIAM WARD BROWNE, Ph.D.,	*Assistant Professor*

CHEMISTRY

CHARLES BASKERVILLE, Ph.D.,	*Professor*
HERBERT R. MOODY, Ph.D.,	*Professor*
RESTON STEVENSON, Ph.D.,	*Associate Professor*
ARTHUR SCHUTT,	*Instructor*
WALTER H. PEARCE,	*Special Instructor*
JOHN E. BROLLES, JR., B.S.,	*Tutor*
HARRY PETER COATS, A.M.,	*Fellow*

ECONOMICS

GEORGE MONROE BRETT, A.B.,	*Assistant Professor*

ENGINEERING

CIVIL AND MECHANICAL

FREDERICK SKENE, B.S., C.E.,	*Professor*
ARTHUR BRUCKNER, B.S., M.E.,	*Assistant Professor*
FREDERIC O. X. McLOUGHLIN, A.M., C.E.,	*Assistant Professor*
GERARDO IMMEDIATO, C.E., M.E.,	*Assistant Professor*[1]
LOUIS GOODMAN, A.M., C.E.,	*Lecturer*[1]
CHARLES LEE BROAS, B.C.E., S.M.,	*Instructor*
JOSEPH WILLIAM HAYWARD, M.Sc.,	*Instructor*
HARRY M. SPITZENBERG,	*Tutor*

ELECTRICAL ENGINEERING

ALFRED N. GOLDSMITH, Ph.D.,	*Associate Professor*
HARRY BAUM, B.S., E.E.,	*Instructor*
HERMAN B. WAAG, M.E.,	*Fellow*[1]

ENGLISH

LEWIS FREEMAN MOTT, Ph.D.,	*Professor*

GEOLOGY

IVIN SICKELS, M.S., M.D.,	*Professor*

GOVERNMENT AND SOCIOLOGY

WILLIAM B. GUTHRIE, Ph.D.,	*Associate Professor*

HISTORY

NELSON P. MEAD, Ph.D.,	*Professor*

[1] In the Evening Session.

HYGIENE

THOMAS ANDREW STOREY, Ph.D., M.D., *Professor*

MATHEMATICS

PAUL SAUREL, D.Sc., *Professor*

PHILOSOPHY

HOWARD D. MARSH, Ph.D., *Assistant Professor*

PHYSICS

WILLIAM FOX, B.S., M.E., *Professor*
CHARLES A. CORCORAN, A.M., *Assistant Professor*

PUBLIC SPEAKING

JOSEPH A. MOSHER, Ph.D., *Assistant Professor*

ROMANCE LANGUAGES

CHARLES A. DOWNER, Ph.D., *Professor*

STANDING COMMITTEES

COURSE AND STANDING: Professors Moody and Fox and Dean Skene.

CURRICULUM: Professors Baskerville, Sickels, Hunt, Fox, Goldsmith, Bruckner, Marsh, Mosher, and McLoughlin and Dean Skene.

ADMISSION

The admission of candidates for degrees in the School of Technology is through the prescribed portion of the curriculum leading to the degree of Bachelor of Science. The entrance requirements for such students, therefore, are those of the College of Liberal Arts and Science, which are described on pages 45-48. A person holding a diploma of graduation from the four-year course of one of the City high schools will be admitted without condition as a fresehman in the School of Technology; but subjects listed as entrance subjects, which were not pursued successfully in the high school, will be prescribed for such a student in the College. Special students may be admitted to technological courses upon the same terms as to courses in the College.

COURSES OF STUDY

The School of Technology offers curricula in four branches of engineering, leading respectively to the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer. These courses of study in engineering all include as the first part of their work the courses specifically prescribed in the college curriculum leading to the degree of Bachelor of Science. Engineering students, by presenting their technological courses to meet the elective requirements of the College of Liberal Arts and Science, may qualify for a bachelor's degree, normally at the end of the fourth year, and then complete an engineering curriculum by one more year's work, so securing both a baccalaureate and an engineering degree.

A student may enter the freshman class of the College of Liberal Arts and Science, studying the same subjects as though he desired only the bachelor's degree in Science, and not decide until the end of his freshman year that he will pursue engineering; not until the end of his sophomore year does he need to make a final selection of one of the various branches of engineering. He thus has the opportunity to discover his special aptitude and come to a decision after two years of college work, during which he has been laying a broad foundation for later engineering, scientific, or technical pursuits. Should he find that his abilities are greater in some other direction than in engineering, the college curriculum provides him the opportunity to elect a group of subjects fitted to his needs without any sacrifice of the time already spent.

The Curriculum in Chemical Engineering

In addition to the subjects prescribed for all Science students the course of study in Chemical Engineering includes the following courses in the several departments indicated:

Art: 112, Mechanical Drawing; 201, Advanced Mechanical Drawing and Elementary Machine Design.

Biology: 41, General Bacteriology.

Chemistry: 4, Quantitative Analysis; 20, Physical Chemistry; 70, Electro-Chemistry; 50, Organic Chemistry I; 55, Organic Chemistry II; 33, Advanced Qualitative Analysis; 44, Advanced Quantitative Analysis; 111, Advanced Inorganic Chemistry; 260, Applied Inorganic Chemistry; 261, Practice in Applied Inorganic Chemistry; 265, Applied Organic Chemistry; 266, Practice in Applied Organic Chemistry; 146, Municipal Chemistry; 249, Potable and Industrial Water, and Sewage; 159, Food Inspection and Analysis; 280, Ferriferous Metals; 281, Practice in the Chemistry of Ferriferous Metals; 246, Technology of Fuel and Gas; 269, Chemistry of Commerce; 100, Research.

Economics: 150, Business Organization.

Engineering: C. E. 110, Materials of Construction; E. E. 120, Elementary Electrical Engineering; M. E. 122, Power.

Geology: 12, Mineralogy.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 12, Advanced Mechanics.

These courses count in the aggregate 84 credits, which, added to the 81 credits[1] prescribed for all Science students, make a total of 165 credits required for the degree of Chemical Engineer.

The Curriculum in Civil Engineering

In addition to the subjects prescribed for all Science students the course of study in Civil Engineering includes the following courses in the several departments indicated:

Art: 113, Topographical Drawing; 213, Structural Drafting.

Biology: 41, General Bacteriology.

Chemistry: 262, Industrial Chemistry.

Economics: 150, Business Organization.

Engineering: C. E. 101, Theory of Surveying; C. E. 102, Practical Surveying, First Summer Camp; C. E. 202, Advanced Surveying; C. E. 203, Practical Surveying, Second Summer Camp; C. E. 110, Materials of Construction; C. E. 111, Mechanics of Materials; C. E. 120, Hydraulics; C. E. 221, Hydraulics Laboratory; C. E. 222, Materials Laboratory; C. E. 223, Graphics; C. E. 224, Highways and Pavements; C. E. 225, Masonry; C. E. 226, Railroad Curves; C. E. 232, Roofs, Bridges, and Framed Structures, I; C. E. 233, Sewers and Sewage Disposal; C. E. 235, Foundations; C. E. 236, Railroad Engineering; C. E. 242, Roofs, Bridges, and Framed Structures, II; C. E. 243, Water Supply and Irrigation; C. E. 244, Tunneling and Excavating; C. E. 245, Reinforced Concrete; E. E. 120, Elementary Electrical Engineering; M. E. 122, Power.

Geology: 12, Mineralogy.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 12, Advanced Mechanics.

These courses count in the aggregate 90 credits, which, added to the 81 credits[1] prescribed for all Science students, make a total of 171 credits required for the degree of Civil Engineer.

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[1] This number is based upon the assumption that the candidate for the degree has presented four units of mathematics and one of physics for admission to the College.

The Curriculum in Electrical Engineering

In addition to the subjects prescribed for all Science students the course of study in Electrical Engineering includes the following courses in the several departments indicated:

Art: 112, Mechanical Drawing; 201, Advanced Mechanical Drawing and Elementary Machine Design.

Chemistry: 262, Industrial Chemistry.

Economics: 150, Business Organization.

Engineering: C. E. 101, Theory of Surveying; C. E. 110, Materials of Construction; C. E. 111, Mechanics of Materials; C. E. 120, Hydraulics; C. E. 221, Hydraulics Laboratory; C. E. 223, Graphics; E. E. 120, Elementary Electrical Engineering; E. E. 122, Electrical Measurements; E. E. 124, Alternating Currents; E. E. 230, D. C. Machinery; E. E. 232, Industrial Applications; E. E. 233, Illumination; either E. E. 234, Design, and E. E. 235, Telegraph and Telephone, or E. E. 126 Radio Engineering, I; E. E. 237, Power Plants; E. E. 240, A. C. Machinery; E. E. 242, Distribution and Transmission; either E. E. 243, Electric Railroads, and E. E. 244, Design, or E. E. 146, Radio Engineering, II; M. E. 210, Forge and Foundry; M. E. 211, Mechanical Instrument Laboratory; M. E. 220, Pattern Making; M. E. 122, Power; M. E. 230, Machine Tools.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 11, Advanced Electricity; 12, Advanced Mechanics.

These courses count in the aggregate 82 credits, which, added to the 81 credits[1] prescribed for all Science students, make a total of 163 credits required for the degree of Electrical Engineer.

The Curriculum in Mechanical Engineering

In addition to the subjects prescribed for all Science students the course of study in Mechanical Engineering includes the following courses in the several departments indicated:

Art: 112, Mechanical Drawing; 201, Advanced Mechanical Drawing and Elementary Machine Design.

Chemistry: 262, Industrial Chemistry.

Economics: 150, Business Organization.

Engineering: C. E. 101, Theory of Surveying; C. E. 110, Materials of Construction; C. E. 111, Mechanics of Materials; C. E. 120, Hydraulics; C. E. 221, Hydraulics Laboratory; C. E. 223, Graphics; E. E. 120, Elementary Electrical Engineering; M. E. 210, Forge and Foundry; M. E. 211, Mechanical Instrument Laboratory; M. E. 220, Pattern Making; M. E. 221, Heat Power Engineering, I; M. E. 124, Kinematics; M. E. 230, Machine Tools; M. E. 231, Heat Power Engineering Laboratory, I; M. E. 232, Water Power; M. E. 233, Water Power Laboratory; M. E. 234, Machine Design, I; M. E. 235, Heat and Ventilation; M. E. 240, Shop Processes; M. E. 241, Power Plants; M. E. 242, Heat Power Engineering, II; M. E. 243, Heat Power Engineering Laboratory, II; M. E. 244, Machine Design, II.

Physics: 7, Problem Work in Physics 3; 8, Problem Work in Physics 4; 12, Advanced Mechanics; 13, Heat (Advanced).

These courses in the aggregate count 78 credits, which, added to the 81 credits[1] prescribed for all Science students, make a total of 159 credits required for the degree of Mechanical Engineer.

[1] This number is based upon the assumption that the candidate for the degree has presented four units of mathematics and one of physics for admission to the College.

THE SCHOOL OF BUSINESS AND CIVIC ADMINISTRATION

FACULTY AND INSTRUCTING STAFF

Arranged by Departments

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FREDERICK B. ROBINSON, Ph.D., *Dean*
MAXIMILIAN PHILIP, Sc.D., C.P.A., *Secretary*
PAUL H. LINEHAN, Ph.D., *Assistant Director of the Evening Session.*

ECONOMICS

FREDERICK B. ROBINSON, Ph.D.,	*Professor*
GUY EDWARD SNIDER, Ph.D.,	*Associate Professor*
LEWIS SAYRE BURCHARD, A.B., LL.B.,	*Associate Professor*
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GEORGE MONROE BRETT, A.B.,	*Assistant Professor*
CHARLES A. HOUSTON, A.B., LL.B.,	*Assistant Professor*[1]
[2]BENJAMIN PARKE DEWITT, A.M., J.D.,	*Assistant Professor*[1]
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WILLIAM WALKER ORR, A.B.,	*Lecturer*[1]
JOHN FRANKLIN CROWELL, Ph.D., Litt.D., LL.D.,	*Lecturer*[1]
A. M. FOX, C.E.,	*Lecturer*
MYER PARMET, B.C.S., C.P.A.,	*Lecturer*[1]
WARREN M. MAULE,	*Special Lecturer*[1]
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ALBERT C. BONASCHI, M.D.,	*Special Lecturer*[1]
LAWRENCE W. ROGERS,	*Special Lecturer*[1]
BURTIS H. COLLINS,	*Special Lecturer*[1]
ROSSITER HOLBROOK, C.E.,	*Special Lecturer*[1]
PIERRE ZALDARI, B. in Sc. and Letters,	*Special Lecturer*[1]
LEONHARD FELIX FULD, LL.M., Ph.D.,	*Special Lecturer*[1]
ROBERT H. BROWN, C.P.A.,	*Instructor*[1]
ALEXANDER L. PUGH, B.S. in Econ.,	*Instructor*[1]
JAMES E. TALLENT, B.S., C.P.A.,	*Instructor*[1]
[2]DAVID A. EMBURY, A.B., LL.B.,	*Instructor*[1]
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CHARLES R. TAYLOR, B.C.S., C.P.A.,	*Instructor*[1]
AVRAHM YARMOLINSKY, Ph.D.,	*Instructor*[1]
FORREST HYDE, B.L.,	*Instructor*[1]
LOUIS PRASHKER, A.B., J.D.,	*Instructor*[1]
DAVID BERK, B.S.,	*Instructor*[1]
BENJAMIN L. BLAU, B.S.,	*Instructor*[1]
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BENJAMIN F. GRAY, B.C.S., C.P.A.,	*Special Instructor*[1]
MAX S. SCHEIBER, B.C.S., C.P.A.,	*Special Instructor*[1]
JOSEPH F. CRATER, A.B., LL.B.,	*Special Instructor*[1]
BENJAMIN HARROW, B.A., C.P.A.,	*Tutor*[1]

[1]In the Evening Session.
[2]Absent on leave.

Meyer J. Ostrow, C.P.A.,	*Tutor*[1]
William T. Van Alstyne, Ph.B., LL.B.,	*Tutor*[1]
George Dariff, B.C.S., C.P.A.,	*Tutor*[1]
John Horace Mariano, Ph.D.,	*Tutor*[1]
Jos. M. Cunningham, B.S. in Econ.,	*Tutor*[1]
Moses A. Berenson, B.C.S., C.P.A.,	*Tutor*[1]
Richard W. Grevé,	*Tutor*[1]

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Paul Klapper, Ph.D.,	*Professor*

ENGINEERING

Frederick Skene, B.S., C.E.,	*Professor*
Alfred N. Goldsmith, Ph.D.,	*Associate Professor*

ENGLISH

Louis Freeman Mott, Ph.D.,	*Professor*
Harry C. Krowl, Ph.D.,	*Professor*
Howard C. Green, A.B.,	*Instructor (Business English)*[1]
Michael J. Keleher, A.M.,	*Instructor (Business English)*[1]
Joseph X. Healy, A.M.,	*Instructor (Business English)*[1]
Bernard Sobel, B.S., Ph.B., M.A.,	*Instructor (Business English)*[1]

GERMAN

Camillo von Klenze, Ph.D.,	*Professor*

GOVERNMENT AND SOCIOLOGY

Stephen Pierce Duggan, Ph.D.,	*Professor*
William B. Guthrie, Ph.D.,	*Associate Proefssor*

HISTORY

Nelson P. Mead, Ph.D.,	*Professor*
Holland Thompson, Ph.D.,	*Professor*

MATHEMATICS

Maximilian Philip, Sc.D., C.P.A.,	*Assistant Professor*

PUBLIC SPEAKING

Erastus Palmer, A.M.,	*Professor*
Daniel W. Redmond, Ph.D.,	*Associate Professor*
Arthur James Weston, A.M.,	*Instructor*[1]
Thomas E. Coulton, A.M.,	*Instructor*

ROMANCE LANGUAGES

Charles A. Downer, Ph.D.,	*Professor*
Ventura Fuentes, M.D.,	*Associate Professor*
Americo Ulysses N. Camera, Ph.D.,	*Assistant Professor*
Alfonso Arbib-Costa, Dipl.,	*Instructor*
Rafael Marin, B.S.,	*Special Instructor*[1]

STANDING COMMITTEES

Curriculum: Professor Mott, Chairman; Dean Robinson, Professors Guthrie, Fuentes, Snider, Brett, and Houston.

Course and Standing: Dean Robinson, Chairman; Professors Krowl, Mead, and Houston and Mr. Hinds.

John P. Pratt, *Assistant to the Dean.*

[1]In the Evening Session.

ADMISSION

For the curriculum leading to the degree of **Master of Business Administration,** the methods of admission, rules and interpretations, and number of units for entrance are the same as those of the College of Liberal Arts and Science. The list of elective subjects, however (See page 45), is enlarged to include the following:

Bookkeeping and Accounting.....½ to 1½ units
Stenography, Typewriting and Office Practice.....½ to 1 unit

One or more special commercial subjects in the group:

Commercial Law, Commercial Geography, Foreign Trade, Marketing, not to exceed.....1½ units

A person holding a diploma of graduation from the four-year commercial course of one of the City high schools will be admitted without condition as a freshman in the School of Business and Civic Administration; but subjects listed as entrance subjects, which were not pursued successfully in the high school will be prescribed for such a student in the College.

A person holding a liberal bachelor's degree from an approved college or university may be admitted to the School of Business and Civic Administration and be eligible for the Master's degree upon the completion of one specialization group (see page 65) and such prerequisite studies as the Committee on Course and Standing of the School may prescribe.

To the curriculum offered in the Evening Session and leading to the degree of **Bachelor of Business Administration,** students are admitted upon meeting one of the following requirements:

(*a*) Completion of an approved four years high school course.
(*b*) Presentation of fifteen college entrance units, as follows:

English (four years course)..... 3 units
History ..... 1 unit
Foreign Languages.....4 or 5 units
Four years of one, or three of one and two of another.

Mathematics ..... 2 units
Electives .....5 or 4 units
Note: (i) Students presenting fifteen units but lacking some required

unit must carry the prescribed subjects as college work. (ii) Any of the courses in history, languages, or mathematics offered in a New York City high school are accepted. (iii) The elective group is that defined above for admission to the curriculum leading to the degree of Master of Business Administration.

For the **Diploma of Graduate in Accountancy**, a student may become a candidate either by meeting the entrance requirements for the curriculum leading to the degree of Bachelor of Business Administration or by presenting a Certified Public Accountant's qualifying certificate issued by the Regents of the University of the State of New York.

Special students may be admitted to courses in the School of Business and Civic Administration upon the same terms as to courses in the College.

COURSES OF STUDY

The purpose of the School of Business and Civic Administration is to fit men to carry on business, public and private. The principle is recognized that private business is public service in a broad sense and public administration cannot be unmindful of the needs of private business. The two are interrelated and on the technical side they depend on similar devices and methods for their effectiveness. It is furthermore recognized that leaders in either field must be men of broad training.

The School offers, upon the basis of the prescribed work in any one of the curricula in Liberal Arts and Science, a five-year curriculum leading to the degree of Master of Business Administration. The School also offers, in the Evening Session, a curriculum of one hundred and twenty semester hours leading to the degree of Bachelor of Business Administration, and shorter professional curricula leading to the Diploma of Graduate in Accountancy, and to the certificate of Junior Accountant.

REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

A.—Fundamental Prescription

Any one of the following prescribed groups of undergraduate studies:

	Arts	Science	Social Science
Biology	4 credits	4 credits	4 credits
Chemistry	6 "	9 "	6 "

	Arts	Science	Social Science
Economics	3 credits	3 credits	6 credits
Economics	3 "	3 "	6 "
English	6 "	6 "	6 "
Government and Sociology	3 "	3 "	6 "
History	7 "	7 "	12 "
Hygiene	4 "	4 "	4 "
Military Science	4 "	4 "	4 "
Philosophy	3 "	3 "	9 "
Public Speaking	8 "	8 "	8 "
Latin	14 "		
Second Language	14 "	7 "	7 "
Third Language or Comparative Literature	6 "		
Mathematics[1]	..	10 "	4 "
Physics[1]	..	6 "	4 "
Drawing (Art 1-2)	..	4 "	
Geology	..	3 "	
	[1]82 "	[1]81 "	[1]80

B—Added General Requirement

These courses are required for the M. B. A. degree and they may be counted toward the fulfilment of the elective requirements for any one of the baccalaureate degrees of the College:

Economics 2—Evolution of Industry	3 credits
Economics 12—Resources of the United States	3 "
History 3—Contemporary European History	3 "
History 4—Contemporary United States History	2 "
Economics 271—Market Geography	2 "
Philosophy 5—General Psychology	3 "
Government and Sociology 5—Elements of Sociology	3 "
Economics 20—Money and Banking	3 "
Economics 150—Business Organization	3 "
Economics 130-131—Accounting, first year	6 "
Economics 230-231—Accounting, second year	6 "
Economics 190—Business Law, first term	3 "
Economics 191—Business Law, second term	3 "
	43 "

C.—Group Specialization

One of the following specialized groups of studies must be pursued:

GROUP I

General Business Management

Economics 232—Cost Accounting	2 credits
Economics 250—Business Management	3 "

[1] These figures are based upon the supposition that the student has presented three and a half units of mathematics for admission to the Arts or Social Science curriculum, or four units of mathematics for admission to the curriculum in Science, and a unit of physics for admission to any one of the three curricula.

Economics 220—Business Finance	2	credits
Economics 11—Problems of Political Economy	3	"
Economics 13—Labor Problems	3	"
Economics 155—Advertising	3	"
Economics 156—Marketing	3	"
Economics 192—Business Law (3d Term)	3	"
Philosophy 54—Psychology of the Volitional Processes, or Special course in Income Tax or Business	3 or 2	"
Thesis	4	"
	29 or 28	"

GROUP II

Public Service

Government and Sociology 11—American Constitutional Law.	3	credits
Government and Sociology 14—Comparative Government	3	"
Government and Sociology 15—State Legislation	3	"
Government and Sociology 23—Municipal Administration	3	"
Economics 232—Cost Accounting	2	"
Economics 240—Public Utilities	2	"
Economics 235—Municipal Accounting	2	"
Government and Sociology 16—Administrative Law in the United States	3	"
Government and Sociology 25—Public and Municipal Finance, or History 36—Development of the State and City of New York—or other courses in Government	3	"
Thesis	4	"
	28	"

GROUP III

Foreign Trade and Consular Service

Economics 175—Business Methods in Foreign Trade (Marketing)	3	credits
Economics 176—Business Methods in Foreign Trade (Ocean Trade and Traffic)	3	"
Economics 173—South American Markets, or other special Market Course	3	"
Government and Sociology 12—International Law	3	"
History 39—Development of South American States	3	"
Economics 70—Foreign Exchange and Financing Foreign Trade	3	"
Economics 222 and 272—Domestic and Foreign Credit	4	"
Thesis	4	"
	26	"

GROUP IV

Accounting

Economics 232-233—Cost Accounting	4	credits
Economics 237-238—Auditing	4	"
Economics 243-244—Advanced C. P. A. Problems	4	"
Economics 242—Judicial Accounting	2	"

Economics 192—Business Law (3rd Term)	3	credits
Government and Sociology 57—Statistics	3	"
Thesis	4	"
	24	"

Summary of Requirements for the M. B. A. Degree

	Arts	Science	Social Science
Fundamental, prescribed college credits	82	81	80
Added general requirement	43	43	29
Group election (average)	26	26	26
Free election (average)	9	10	25
Total credits for M. B. A. Degree	160	160	160

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

The course of study leading to this degree is offered in the Evening Session primarily to meet the needs of persons employed during the day. It comprises 120 semester hours, assigned as follows:

Prescribed Courses

English 201, Business Composition	2	hours
English 202, Advanced Business Writing	2	"
English Literature (a course selected from the electives of the English Department)	2	"
Public Speaking, 1, 5, 6, and 7	4	"
A Modern Language	6	"
This requirement is based upon the assumption that the student has presented two units of a modern language for entrance. (See p. 63.) Otherwise, he must take enough courses in the modern language chosen to make a total of at least three years' study of it.		
Science (Biology 1 or Chemistry 1-2 or Physics 1-2)	4 or 6	"
If not presented for entrance.		
History 3, Contemporary European History	3	"
History 4, The United States since 1876, or History 34, Contemporary American Problems	2 or 3	"
Mathematics 120, Mathematical Theory of Investment	2	"
Economics 1, Elements of Economics	3	"
Economics 2, Evolution of Industry	3	"
Economics 12, Resources and Industries of the United States	3	"
Economics 20, Money and Banking	3	"
Economics 150, Business Organization	3	"
Economics 130-131 and 230-231, Accounting I and II	16	"
Economics 232, Cost Accounting	2	"
Economics 190, 191, 192, Business Law	9	"
Philosophy 5, Psychology	3	"
Government and Sociology 1, American Government and Citizenship	3	"
	75-78	"

Elective Courses

One of the following elective groups (described on pp. 65-67) must be taken, and in addition enough free electives to make up the total requirement—120 credits:

Group I—General Business
Group II—Public Service
Group III—Foreign Trade and Consular Service
Group IV—Accounting

(Others to be added)

Credit in Addition to Credits Earned by Classroom Attendance

Students in the Evening Session of the School of Business and Civic Administration will not receive additional credits because of grades earned in courses pursued in class. But, on the other hand, any student who has obtained 50 per cent. of the total credits required for graduation, with the grade of D, must earn all other credits with a grade of C or better. All students who are to receive a degree in this School must have had successful business experience. Such experience is regarded as laboratory work related to the instruction in the class room. There is only one real laboratory of business, and that is the business office itself. Therefore, all students must earn at least six credits toward the degree by actual business experience; and others with wider experience may earn up to, but not exceeding twenty-four credits. The exact number of such credits that may be counted toward a degree will depend largely upon the excellence of the student's class room work.

The Committee on Course and Standing will pass upon the nature and scope of the business experience for which credit is to be awarded. In general, it must be in some position demanding initiative and judgment. Credit will not be given for mere routine service in a commercial house.

REQUIREMENTS FOR THE DIPLOMA OF GRADUATE IN ACCOUNTANCY

Prescribed Courses

Economics 130-131—First Year, Accounting, Theory, Practice, and Problems	128 hours
Economics 230-231—Second Year, Accounting, Theory, Practice, and Problems	128 "
Economics 232—Cost Accounting	32 "
Economics 237—Auditing	32 "
Economics 240—Public Utilities Accounting and Statistics	32 "
Economics 242—Judicial Accounting	32 "
Economics 243-244—Advanced Accounting Theory and Problems	64 "
Economics 190—First Term, Business Law	48 "

Economics 191—Second Term, Business Law	48	hours
Economics 192—Third Term, Business Law	48	"
Economics 1—Elements of Economics	48	"
Economics 2—Evolution of Industry	48	"
Economics 20—Money and Banking	48	"
English 201-202—Elements of Business Writing	64	"
Public Speaking 1—Vocal Expression	16	"
Public Speaking 5-6—Debate	32	"
Public Speaking 7—Extemporaneous Speaking	16	"

Elective Courses

In addition to the courses indicated in the foregoing list, the student must elect enough other courses in the School of Business or in the Departments of Economics and Government in the Evening Session to make a total of not less than 1,000 hours of study.

REQUIREMENTS FOR THE CERTIFICATE OF JUNIOR ACCOUNTANT

The 496 hours indicated in the following list and one course in Government, Evening Session. Students preparing for positions as junior accountants in general practice rather than public service may substitute Cost Accounting and Auditing in place of the two courses in Municipal Accounting.

Prescribed Courses

Economics 130-131—First Year, Accounting, Theory, Practice, and Problems	128	hours
Economics 230-231—Second Year, Accounting, Theory, Practice, and Problems	128	"
Economics 234—Municipal Accounting, Departmental	32	"
Or Economics 232—Cost Accounting.		
Economics 235—Municipal Accounting, General	32	"
Or Economics 237—Auditing.		
Economics 1—Elements of Economics	48	"
English 201-202—Elements of Business Writing	64	"
Public Speaking 1—Vocal Expression	16	"
Public Speaking 5-6—Debate	32	"
Public Speaking 7—Extemporaneous Speaking	16	"

THE SCHOOL OF EDUCATION

FACULTY AND INSTRUCTING STAFF

Arranged by Departments

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PAUL KLAPPER, Ph.D., *Dean*
SAMUEL B. HECKMAN, Ph.D., *Secretary*

ART

[1]LEIGH HARRISON HUNT, M.S., M.D., *Professor*
[1]ABRAM G. SCHULMAN, A.B., *Assistant Professor*

BIOLOGY

[1]GEORGE G. SCOTT, Ph.D., *Associate Professor*
[1]ABRAHAM J. GOLDFARB, Ph.D., *Assistant Professor*

CHEMISTRY

[1]CHARLES BASKERVILLE, Ph.D., *Professor*
[1]WILLIAM L. ESTABROOKE, Ph.D., *Assistant Professor*

CLASSICAL LANGUAGES AND LITERATURES

[1]CARLETON L. BROWNSON, Ph.D., *Professor*
[1]ALLAN P. BALL, Ph.D., *Associate Professor*

ECONOMICS AND BUSINESS

[1]FREDERICK B. ROBINSON, Ph.D., *Professor*
[1]LYNN M. SAXTON, Ph.D., *Assistant Professor*

EDUCATION

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[1]SAMUEL B. HECKMAN, Ph.D., *Associate Professor and Director of the Educational Clinic*
[1]JAMES ROBERT WHITE, Ph.D., *Assistant Professor*[3]
[1]ALBERT K. ALDINGER, M.D., *Lecturer*[2]
Director of Physical Training, New York Schools.
[1]WILLIAM E. GRADY, M.A., LL.B., *Lecturer*[2]
District Superintendent of Schools.
[1]EDWARD MANDEL, LL.M., *Lecturer*[2]
District Superintendent of Schools.
[1]EUGENE NIFENECKER, B.A., M.A., *Lecturer*[2]
Director, Bureau of Reference and Research.
[1]HUGO NEWMAN, B.S., Pd.M., *Lecturer*[2]
Principal, N. Y. Training School for Teachers.
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District Superintendent of Schools.
[1]JOHN S. ROBERTS, Ph.D., *Lecturer*[2]
District Superintendent of Schools.
[1]EDWARD WALMSLEY STITT, Ph.D., *Lecturer*[2]
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[1]BENJAMIN VEIT, B.S., LL.B., *Lecturer*[2]
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[1]JOHN E. WADE, B.S., M.A., *Lecturer*[2]
District Superintendent of Schools.
[1]JOSEPH H. WADE, Ph.D., *Lecturer*[2]
District Superintendent of Schools.

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[1]Voting Member of the Faculty of the School of Education.
[2]In the Afternoon Division.
[3]Absent on leave.

ERNEST L. CRANDALL, *Special Lecturer*[2]
Supervisor of Lectures and Visual Instruction.

STEPHEN F. BAYNE, M.A., *Special Lecturer*[2]
District Superintendent of Schools.

HENRY E. JENKINS, LL.B., *Special Lecturer*[2]
District Superintendent of Schools.

FRANCIS H. J. PAUL, Ph.D., *Special Lecturer*[2]
Principal, DeWitt Clinton High School.

MORRIS E. SIEGEL, M.A., *Special Lecturer*[2]
Director, Evening and Continuation Schools.

GEORGE H. CHATFIELD, *Instructor*[2]
Assistant Director, Bureau of Attendance.

THOMAS M. DONOHUE, Pd.M., *Instructor*[2]
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JOSEPH J. EATON, A.M., *Instructor*[2]
Director of Industrial Arts, Yonkers.

ALBERT W. GARRITT, A.B., *Instructor*[2]
Acting Director of Shopwork, New York Schools.

I. H. GOLDBERGER, M.D., *Instructor*[2]
Assistant Director of Educational Hygiene, New York Schools.

JACOB GREENBERG, M.A., *Instructor*[2]
Supervisor of Modern Languages, Junior High Schools.

WILLIAM A. HANNIG, Ph.D., *Instructor*[2]
Examiner, Board of Education.

HENRY E. HEIN, Ph.D., *Instructor*[2]
Principal, P. S. 40, Bronx.

SIMON HIRSDANSKY, A.M., *Instructor*[2]
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Principal, East Side Continuation School.

LOUIS MARKS, A.M., *Instructor*[2]
Examiner, Board of Education.

FLORENCE M. MARSHALL, A.B., *Instructor*[2]
Principal, Manhattan Trade School for Girls.

MORRIS MEISTER, Ph.D., *Instructor*[2]
Instructor, Physical Science, Columbia University.

JOHN B. OPDYCKE, *Instructor*[2]
Chairman, English Department, Roosevelt High School.

LUELLA A. PALMER, A.M., *Instructor*[2]
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Principal, P. S. 58, Brooklyn.

OSWALD SCHLOCKOW, Ph.D., *Instructor*[2]
Principal, P. S. 50, Brooklyn.

ISIDORE SPRINGER, Ph.D., *Instructor*[2]
Principal, P. S. 25, Brooklyn.

EGBERT M. TURNER, A.M., *Instructor*
Assistant to the Dean and to the Director of the Educational Clinic.

RUFUS A. VANCE, LL.B., *Instructor*[2]
Principal, Junior High School No. 148, Brooklyn.

JOSEPH K. VAN DENBURG, Ph.D., *Instructor*[2]
Examiner, Board of Education.

SAMUEL VIERTEL, M.A., *Instructor*[2]
Principal, P. S. 10, Bronx.

ELIZABETH A. WALSH, A.M., *Instructor*[2]
Assistant Inspector of Ungraded Classes.

GUY F. WELLS, A.M., *Instructor*[2]
Instructor of Education,
New York Training School for Teachers.

JAMES H. ALLEN, A.M., Pd.M., *Special Instructor*[2]
Director, Evening Vocational Teacher Training Classes.

JOHN R. CLARK, Ph.D., *Special Instructor*[2]
Special Teacher of Mathematics,
Lincoln School of Teachers' College.

I. DAVID COHEN, Pd.M., *Special Instructor*[2]
In Charge, Brooklyn Continuation School.

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[2]In the Afternoon Division.

CHRISTINE DOBBINS, *Special Instructor*[2]
Inspector of Athletics and Folk Dancing.

IDA E. FISCHER, B.A., *Special Instructor*[2]
Instructor of Music, Morris High School.

S. WORDSWORTH FOX, B.A., *Special Instructor*[2]
First Assistant, Commercial Subjects,
Washington Irving High School.

WILLIAM R. HARPER, B.A., *Special Instructor*[2]
Head of Department of Physical Training,
New York Training School for Teachers.

J. BLAKE HILLYER, M.A., *Special Instructor*[2]
Instructor of Physical Training in New York Schools.

MICHAEL A. JONES, *Special Instructor*[2]
Inspector of Athletics.

VAN EVRIE KILPATRICK, Ph.D., *Special Instructor*[2]
Director of School Gardening.

CECILE KING, B.S., *Special Instructor*[2]
Teacher of Civics, Manhattan Trade School.

FRIEDA KOHN, B.A., *Special Instructor*[2]
Instructor of Art Weaving, Junior High School No. 62.

CHARLES W. LAFFIN, M.A., *Special Instructor*[2]
In Charge, West Side Continuation School.

CLYDE C. LISTER, *Special Instructor*[2]
Instructor of Penmanship,
Maxwell Training School for Teachers.

JOHN J. MCHUGH, *Special Instructor*[2]
Inspector of Athletics.

EMILY A. O'KEEFE, *Special Instructor*[2]
Inspector of Athletics and Folk Dancing.

ROWLAND A. PATTERSON, *Special Instructor*[2]
Inspector of Athletics.

WILLIAM E. REED, M.A., *Special Instructor*[2]
Teacher of Civics, Manual Training High School, Brooklyn.

FLORENCE W. SLATER, B.S., *Special Instructor*[2]
Instructor, Washington Irving High School.

SAMUEL TANENBAUM, B.S., *Special Instructor*[2]
Instructor of Shopwork, New York Schools.

MARTHA S. TOURTE, *Special Instructor*[2]
Special Teacher of Music in the Public Schools.

JOHN DOMERHUIZEN, *Special Instructor*[2]

JULIUS A. MILLER, M.D., *Tutor, in the Educational Clinic*

E. R. BRAND, A.B., *Tutor, in the Educational Clinic*

EDNA FARNSWORTH, *Tutor, Continuation Schools*[2]

WILLIAM FLANAGAN, B.A., *Tutor, Continuation Schools*[2]

JAMES HARRIGAN, B.A., *Tutor, Continuation Schools*[2]

J. RITCHIE STEVENSON, *Tutor, Continuation Schools*[2]

THOMAS ANSKIS, *Tutor in Shopwork*[2]

LEROY BARKER, *Tutor in Shopwork*[2]

ANNIE COE, MRS., *Tutor in Shopwork*[2]

THOMAS DARLING, *Tutor in Shopwork*[2]

ARTHUR GARDNER, *Tutor in Shopwork*[2]

THOMAS HOGAN, *Tutor in Shopwork*[2]

WALTER MAHER, *Tutor in Shopwork*[2]

CHARLES MULLER, *Tutor in Shopwork*[2]

WILLIAM RUSHFORTH, *Tutor in Shopwork*[2]

LAURENCE J. YOUNG, *Tutor in Shopwork*[2]

SAMUEL ZUCKER, *Tutor in Shopwork*[2]

ENGLISH

[1]LEWIS FREEMAN MOTT, Ph.D., *Professor*

HARRY C. KROWL, Ph.D., *Professor*

CHARLES F. HORNE, Ph.D., *Associate Professor*

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[1]Voting member of the Faculty of the School of Education.
[2]In the Afternoon Division.

Alexis I. du Pont Coleman, Ph.D.,	*Associate Professor*
[1]J. Vincent Crowne, Ph.D.,	*Assistant Professor*
Felix Grendon, Ph.D.,	*Assistant Professor*
Bird W. Stair, M.S.,	*Assistant Professor*
John L. Foley, M.A., Instructor of English, High School of Commerce.	*Special Instructor*[2]
Josephine Britton, Ph.D., Instructor of English, Bushwick High School.	*Special Instructor*[2]

GERMAN

[1]Camillo von Klenze, Ph.D.,	*Professor*
[1]Henry G. Kost, B.S.,	*Assistant Professor*

GOVERNMENT

[1]Stephen P. Duggan, Ph.D.,	*Professor*
[1]William B. Guthrie, Ph.D.,	*Associate Professor*
Alfred C. Bryan, Ph.D., Head of Department of History and Government, High School of Commerce.	*Special Instructor*[2]

HISTORY

[1]Nelson P. Mead, Ph.D.,	*Professor*
[1]J. Salwyn Schapiro, Ph.D.,	*Professor*
Livingston Rowe Schuyler, Ph.D.,	*Associate Professor*
E. E. Giltner, A.B., Head of Department of History, New York Training School for Teachers.	*Special Instructor*[2]

HYGIENE

[1]Thomas A. Storey, M.D., Ph.D.,	*Professor*
[1]Frederic A. Woll, Ph.D.,	*Associate Professor*

MATHEMATICS

[1]Paul Saurel, D.Sc.,	*Professor*
[1]Paul H. Linehan, Ph.D.,	*Assistant Professor*

MUSIC

[1]Samuel A. Baldwin, F.A.G.O.,	*Professor*
Marie Florence MacConnell, Director of Music, Jamaica High School.	*Special Instructor*[2]

PHILOSOPHY

[1]Harry Allen Overstreet, A.B., B.Sc. (Oxon.),	*Professor*
[1]John Pickett Turner, Ph.D.,	*Associate Professor*

PHYSICS

[1]William Fox, B.S., M.E.,	*Professor*
[1]Charles A. Corcoran, B.S., A.M.,	*Assistant Professor*

PUBLIC SPEAKING

[1]Erastus Palmer, A.M.,	*Professor*
[1]Daniel W. Redmond, Ph.D.,	*Associate Professor*
Gustav F. Schulz, M.A.,	*Instructor*
Elizabeth H. McNally, A.B., Teacher, Speech Improvement, N. Y. Training School for Teachers.	*Instructor*[2]
Anna I. Birmingham, Teacher of Speech Improvement.	*Special Instructor*[2]

[1]Voting Member of the Faculty of the School of Education.
[2]In the Afternoon Division.

ROMANCE LANGUAGES

[1]Charles A. Downer, Ph.D.,	*Professor*
[1]Ventura Fuentes, A.B., M.D.,	*Associate Professor*
Gaston A. Laffargue, B-ès-L.,	*Associate Professor*
Felix Weill, L-ès-L.,	*Associate Professor*
Francesco Ettari, Ph.D.,	*Instructor*
A. Arbib-Costa,	*Instructor*

STANDING COMMITTEES

Curriculum: Professor Mott (*Chairman*), Dean Klapper, Professors Duggan, Robinson, Heckman, and Woll, and Superintendent Joseph H. Wade.

Course and Standing: Professor Bbownson (*Chairman*), Dean Klapper, Professors Crowne, Linehan, and Goldfarb, and Superintendent Stitt.

Egbert M. Turner, A.M.,	*Assistant to the Dean*
Maurice Iserman, B.S. in S.S.,	*Registrar*

[1]Voting Member of the Faculty of the School of Education.

ADMISSION

Candidates for the degree of Bachelor of Science in Education must meet the admission requirements of the College of Liberal Arts and Science, which amount to the completion of at least fifteen units of secondary school work. These are described on pages 45-48. Graduates of a recognized normal course who are engaged in teaching may be admitted to advanced standing in the School of Education, with an allowance of credit for their normal school work which is indicated in the following statement of the curriculum.

FEES

Many of the courses in the School of Education, which are offered in places and at hours chosen especially to meet the convenience of teachers and librarians, are subject to a special registration fee of $2.50. Courses under the joint control of the College and the Bureau of Lectures of the Board of Education are offered at much reduced registration fees, usually $1. Courses for which tuition fees also are charged are given numbers above 200. The fees in all cases are stated under the descriptions of the courses.

COURSES OF STUDY

The School of Education offers, upon the basis of the required work of any one of the curricula of the College of Liberal Arts and Science, a specialized curriculum of the same extent as these but leading to the degree of Bachelor of Science in Education. It also offers a further curriculum including work amounting to twenty-eight credits in addition to the one hundred and thirty-four required for the bachelor's degree, leading to the degree of Master of Science in Education. Besides these regular curricula leading to degrees, it offers a number of groups of related courses, designed to give greater expertness in particular fields of educational effort. Upon the successful completion of such a group of courses a Special Certificate in Education is awarded.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION

1. For Students in the **College of Liberal Arts and Science.**

A. PRESCRIBED WORK IN THE COLLEGE

The completion of the prescribed courses of any of the curricula leading to the Bachelor's degree, in Arts, Science, or Social Science, as described on pages 49, 50..... 80-82 credits

B. THE SCHOOL PRESCRIPTIONS.

Biology 21, Theoretic Biology	2 credits
Education 171, General Science	3 "
Philosophy 5, General Psychology	3 "
Education 11, History of Education	4 "
Education 16, Educational Psychology	3 "
Education 21 or 121, Principles of Education	3 "
Education 41, Methods of Teaching and Class Management	5 "
Education 142, Practice Teaching and Observation	1 credit
Hygiene 117, Teaching Physical Training	1 "
Electives in the Department of Education	9 credits
[1]Total School Prescriptions	34 credits

C. ELECTIVES.

Electives	18-20 "
Total Credits required for the Degree of B. S. in Education	134 credits

2. For Students who are **Teaching in a Recognized School** and who are **Graduates of a Recognized Normal Course** requiring a Four Year High School Course for Admission:

A. GENERAL CULTURAL REQUIREMENT.

Biology 1, General Biology	4 credits
Biology 21, Theoretic Biology	2 "
Chemistry 1-2, General Chemistry	6 "
Economics 1 or 101, Elements of Economics	3 "
Economics 130-131, Accountancy	6 "
English 1, Rhetoric	1 credit
English 2, Composition	1 "
English 3, English Literature	4 credits
History 2, Mediaeval and Modern	3 "
History 3, Contemporary European	3 "
Foreign Language, 2 years, to make up 5 years of language when high school and college studies are combined	14 "
Public Speaking 5, 6, 7, 8 (Students must give evidence of ability to speak English with absolute correctness.)	4 credits
Education 171, General Science	3 "
Total, Required Courses	54 credits

B. CREDIT FOR NORMAL COURSE

Philosophy 5, General Psychology	3 credits
Philosophy 12, Logic	3 "
Education 11, History of Education	4 "
Education 16, Educational Psychology	3 "
Education 21 or 121, Principles of Education	3 "
Education 131, Class Management	" "
Education 141, Methods of Teaching	5 "
Education 142, Practice Teaching and Observation—1 additional credit per semester of actual teaching	3 to 5 credits

[1]One credit in English in connection with written work in four courses in Education.

Education 145, Teaching of English	2	credits
Education 146, Teaching of Arithmetic	2	"
Education 249, Teaching of Geography	2	"
Education 148, Teaching of History	2	"
Education 150, Teaching of Nature Study	2	"
Education 152, Teaching of Drawing	1 or 2	"
Education 153, Teaching of Music	1 or 2	"
Education 296, 297, or 298, Teaching of Manual Work	2	
Hygiene 117, Physical Training and Hygiene in the Classroom	1	credit
English	1 or 2	credits
Total	43 to 48	credits[1]

C. EXCUSED.

Military Science	4	credits
Public Speaking	4	"
Total	8	"

D. ELECTIVES.

At least 9 credits in educational courses not part of the original normal courses; approximately	27	"

Total Credits required for the Degree of B. S. in Education 134 credits

REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN EDUCATION.

A candidate for the degree of Master of Science in Education must qualify for admission to the curriculum either

(a) By holding the degree of Bachelor of Science in Education or a similar degree from a college or university recognized by the Board of Regents, or

(b) By holding a baccalaureate degree in arts, letters, philosophy or science from a college or university recognized by the Board of Regents and giving evidence of the successful completion of the prescriptions of the School of Education for the degree of B. S. in Education, or their substantial equivalent.

In addition to the 134 credits required for the Bachelor's degree, candidates for the degree of M. S. in Education must complete work counting 28 credits, distributed as follows:

Thesis	4 credits

A serious study of a problem or topic in education requiring approximately the time and the effort involved in a four-credit course (192 hours). Candidates must submit the subject of the proposed thesis and a detailed outline to the Dean at least two months before the thesis is to be presented. The thesis must show evidence of careful study or investigation, ability to organize data, mature grasp of educational principles and ability to write clearly and effectively.

[1] 48 credits are the approximate equivalent of three semesters of college work.

Courses in Education, which have not been counted toward the Bachelor's degree; not more than 4 credits in any one Group	12 credits
Advanced courses in any one subject taught in the school system, elementary, high, trade or training school, *e.g.*, English, mathematics, physics, psychology, modern language, etc., subject to the approval of the Dean	12 credits
[1]Total	28 credits
Grand Total of Credits Required for the Degree of M. S. in Education	162 credits

REQUIREMENTS FOR SPECIAL CERTIFICATES

CERTIFICATE FOR SPEECH CORRECTION.

Physiology	64 hours	3 credits
Anatomy and Physiology of the Throat	30 "	1 credit
Psychology, General or Educational	45 "	3 credits
Additional Course in Experimental Psychology	45 "	3 "
Speech Correction	30 "	2 "
Advanced Speech Correction	30 "	2 "
Clinic for Speech Correction	90 "	3 "

CERTIFICATE IN PHYSICAL EDUCATION AND RECREATION.

Physiology and Hygiene	90 hours	4 credits
Anatomy	48 "	3 "
School Hygiene or Training School Health Officer.	30 "	2 "
Elementary Physical Educ., Calisthenics and Light Apparatus	60 "	2 "
Advanced Phy. Educ., Apparatus and Gym. Work	60 "	2 "
Folk Dancing	30 "	1 credit
Athletics	60 "	2 credits
Any one of the following:		
(a) Training for Community Work	30 "	1 credit
(b) Sex Education and Social Hygiene	30 "	1 "
(c) History of Physical Education	30 "	2 credits

CERTIFICATE IN ART EDUCATION.

Method and Practice in Pictorial Representation and Design—first course	60 hours	2 credits
Method and Practice in Pictorial Representation and Design—second course	60 "	2 "
One of the following:		
Poster Design and Advertising	60 "	2 "
Commercial Design	60 "	2 "
Mechanical Drawing	60 "	2 "
One of the following:		
Still Life Drawing and Painting	90 "	3 "
Advanced Freehand Drawing	90 "	3 "
Aesthetics and History of Art	60 "	3 "

CERTIFICATE IN ELEMENTARY EDUCATION.

(Open only to those now teaching.)

Experimental Educational Psychology or Psychology of Exceptional Children	30 hours	2 credits
History of Education (one of advanced courses)	30 "	2 "

[1]The head of a department in which courses amounting to twelve credits are taken may require candidates for the degree of M.S. in Education to submit to a special personal examination.

Principles of Education (or Modern Educational Theory)	30	hours	2 credits
Problems in Methods of Teaching	30	"	2 "
Teaching of a Special Subject	30	"	2 "
A course in Education numbered above 200	30	"	2 "

CERTIFICATE IN TEACHING OF MUSIC.

Methods Course in Music Teaching	60	hours	4 credits
Harmony	128	"	8 "
Appreciation of Music	60	"	4 "

Evidence of ability in Vocal or Instrumental Rendition.

CERTIFICATE IN EDUCATION OF EXCEPTIONAL CHILDREN.

(Open only to those now teaching.)

Physiology	90	hours	4 credits
Experimental Educational Psychology	30	"	2 "
Psychology of Exceptional Children	30	"	2 "
Psychological Tests—Intelligence Scales	30	"	2 "
Teaching of Exceptional Children	30	"	2 "

CERTIFICATE IN COMMERCIAL EDUCATION.

Accountancy (130-131), two terms	128	hours	6 credits
Commercial Law, two terms	96	"	6 "
Economics	48	"	3 "
Industrial Organization	48	"	3 "
Economic Geography	48	"	3 "
Methods of Teaching Commercial Subjects, I. (Bookkeeping and Accounting)	30	"	2 "
Methods of Teaching Commercial Subjects, II	30	"	2 "

CERTIFICATE IN SECONDARY EDUCATION.

(Open only to those now teaching.)

Problems of Teaching in the Junior High School or in the Secondary Schools	30	hours	2 credits
Practice Teaching in Junior High Schools or in Secondary Schools	30	hours	1 credit
Problems of Management in Junior High School or in Secondary Schools	30	"	2 credits
Teaching Special Subjects in High School	30	"	2 "
	or 60	"	4 "
Three Courses in a Secondary School Subject	144	"	9 "

CERTIFICATE IN EDUCATIONAL TESTS AND MEASUREMENTS.

Experimental Educational Psychology	30	hours	2 credits
Statistical Study of Education	30	"	2 "
Intelligence Tests	30	"	2 "
Vocational Tests	30	"	2 "
Educational Measurements	30	"	2 "

THE EDUCATIONAL CLINIC

SAMUEL B. HECKMAN, Ph.D.,	*Associate Professor of Education, Director; New York State Certified Psychologist*
EGBERT M. TURNER, A.M.,	*Instructor; New York State Certified Psychologist*
JULIUS ASHER MILLER, M.D.,	*Tutor in Education, Psychiatrist*
EDNA R. BRAND, A.B.,	*Tutor*

The Educational Clinic, which was established in 1913, is planned to aid children in their educational, vocational and social adjustment.

The Clinic occupies Rooms 13-14 in Townsend Harris Hall. Children are sent to it from many sources, such as public schools, vocational guidance committees, hospitals, Red Cross, Big Brother and Big Sister organizations, charity organizations and various other child welfare agencies. The recommendations are based on the findings of the psychological, neurological and physical examinations as well as a consideration of the family history and social environment.

The scope and quantity of the Clinic's work increase yearly. Individual examinations of children are given by appointment only, every afternoon except Saturday. Group examinations are also made in the public schools for the better grading or for the vocational guidance of the members of the classes.

CO-OPERATING AGENCIES

Certain courses in the School of Education are given in co-operation with the Division of Adult Immigrant Education of the New York State Department of Education, the Federation of Teachers' Associations, the Brooklyn Teachers' Association, the Associated Teachers of Shopwork, the New York Public Library, the Alliance Francaise, the Italy-America Society, and the Queens Borough Teachers' Association.

The Bureau of Lectures especially maintains an active co-operation with the School of Education and sponsors the following courses for teachers: *Immigrant Backgrounds,* Professor Crowne; *Current History: Materials and Methods,* Dr. Bryan; *Social Hygiene and Sex Education,* Mr. Hillyer; *Nature Study,* Miss Slater; *Motion Picture Operation,* Mr. Domerhuizen; *Visual Instruction, Methods and Materials,* Mr. Crandall.

THE LIBRARY

The Library of the College is at present located on two floors in the apse of the Main Building. The reference department and reading room occupy the main floor, and the stacks and loan desk the floor below. The reading room is open to all. Reserved reference books for all the courses in the various departments of the college are kept here, and are for use in the room only. Books may be borrowed from the circulation department by persons connected with the College in any way and by outsiders properly introduced under the rules of the Library Committee.

The Library contains over seventy thousand bound volumes and forty thousand pamphlets. Most of these books are to be found in the main collection, though there are considerable department libraries. The Library is a depository for all publications of the United States Government, and receives each year about 250 bound volumes and numerous pamphlets from this source.

The books in the main library and the departmental collections have been purchased largely with the income from the Trust Funds which are described on the following pages.

In 1909 the collection of the late Professor Simon Newcomb, of Washington, D. C., was purchased for the Library by John Claflin, of the class of 1869. About four thousand volumes and two thousand pamphlets, principally in the mathematical and astronomical sciences, are contained in the Newcomb Library.

TRUST FUNDS FOR LIBRARY PURPOSES

THE HOLBROOK LIBRARY FUND

In 1852, Ephraim Holbrook bequeathed to the Board of Education of the City of New York the sum of $5,000, the interest to be applied to the purchase of books for the library of the Free Academy, now the College of the City of New York.

Trustees: The Board of Education.

THE GROSVENOR LIBRARY FUND

In 1856, Seth Grosvenor bequeathed to the Board of Education of New York the sum of $30,000 and provided that the income thereof should be expended in purchasing books to form a library for the Free Academy. The fund now amounts to $32,000.

Trustees: The Board of Education.

THE STEERS BOOK FUND

In 1907, James R. Steers, of the class of 1853, gave a fund of $10,000, the interest on which is to be applied to the purchase of such scientific books as the President of the College may direct, for the use of members of the instructional staff and the students and such other persons as the President may designate. Books are at present purchased

from this fund for the departments of Chemistry, Biology, Engineering, Geology, Hygiene, and Physics.

Trustees: The Board of Trustees of the College.

THE GIBBS-STEERS FUND

In 1911, Mr. Steers established a fund of $5,000, the interest on which is to be applied to the purchase of books for the Wolcott Gibbs Library of Chemistry.

Trustees: The President of the College, the Professor of Chemistry, and the Chairman of the Board of Trustees.

THE CLASS OF 1885 FUND

In 1911, the Class of 1885, by a gift of $2,000, provided a fund the income from which is to be used for the purchase of books for the Department of Romance Languages.

Trustees: Dr. George B. McAuliffe, Dr. Samuel M. Landesman, and Mr. Louis P. Bach.

THE WARBURG FUND

In 1912, Felix M. Warburg, by a gift of $2,500, provided a fund the income from which is to be used for the purchase of periodicals for the departments of Biology, Geology, and Hygiene.

Trustees: The Board of Trustees of the College.

THE LIBERTY LOAN TRUST FUND

In the fall term of 1917, the students and teachers of the College and Preparatory School contributed the sum of $3,050 for the purchase of United States bonds of the Second Liberty Loan. These bonds were presented to the College Library, and that of Townsend Harris Hall, the income to be employed for their benefit in such manner as the trustees of the funds may authorize.

Trustees: The Chairman of the Board of Trustees of the College, the President of the College, and the Librarian.

THE TOWNSEND HARRIS HALL LIBRARY FUND

In the spring term of 1920, the students of the Preparatory High School presented a fund of $3,335.85, chiefly invested in United States bonds of the Third, Fourth, and Fifth (Victory) Liberty Loans, the income of which is devoted to the needs of the Library of Townsend Harris Hall.

Trustees: The Chairman of the Board of Trustees of the College, the President of the College, and the Director of the Preparatory High School.

THE BULLOWA MEMORIAL FUND

In 1920, the College Library received a $500 bond, presented by Jesse G. M. Bullowa, of the class of 1899, Ralph J. M. Bullowa, of the class of 1901, and Emilie M. Bullowa, LL.B., in memory of their brother, the late Ferdinand Ezra M. Bullowa, of the class of 1892.

OTHER TRUST FUNDS

THE CLASS OF 1872 LECTURE FUND

In 1914, the Class of 1872, in commemoration of the fortieth anniversary of their graduation, gave to the Trustees of the College the sum of twelve thousand dollars ($12,000), face value, in the three and one-

half (3½%) per cent. bonds of the City of New York. The income from this fund is devoted annually to securing a course of lectures on subjects to be selected by the Board of Trustees.

THE CLASS OF 1870 FUND

In 1920, the Class of 1870 made to the College a gift of $7,000 for the purpose of equipping courses in Economic Geography.

Trustees: The President of the College, the Professor of Geology, and the Professor of Economics.

PRIZES AND SCHOLARSHIPS

THE PELL MEDALS

In 1849, Duncan C. Pell, by a gift of $500, established a fund the interest on which is devoted to the purchase of a gold medal, to be awarded annually to the student who shall rank highest in all the studies of the year taken together; and in 1856 the donor authorized the trustees of the fund to devote a portion of the income to the provision of a silver medal to be given to the student who shall rank second.

Trustees: The President of the Board of Education and the President of the College.

THE CROMWELL MEDALS

In 1850, Charles T. Cromwell, by a gift of $500, established a fund the interest on which is devoted to the purchase of a gold medal to be awarded annually to the best scholar in history and belles-lettres; in 1856 the donor authorized the provision of a silver medal for the second scholar.

Trustees: The President of the College, the Professor of History (Treas.), and Mr. Henry P. Davison.

THE PRIZE OF THE BOARD OF TRUSTEES AND THE FREIBERG MEMORIAL PRIZE FOR PUBLIC SPEAKING

In 1852, the President of the Board of Education provided a prize for excellence in public speaking. It is continued by the present Board of Trustees.

Members of the junior and senior classes present original orations to compete for the privilege of entering the contest, which is held semi-annually. Six of the orations are selected to be delivered in public for the prize.

In 1920 the Omega Pi Alpha Fraternity established a prize for excellence in public speaking in memory of Hyman Freiberg of the class of 1915, who was killed in action in France in August, 1918 under circumstances of heroism that earned for him the Distinguished Service Cross. This prize is awarded to the student who stands second in the competition for the Prize of the Board of Trustees.

THE WARD MEDALS

In 1853, Augustus H. Ward, by a gift of $1,000, established a fund the interest on which provides for the award of twenty bronze medals, one for each of the studies named, to be awarded annually to the student of most proficiency therein, provided he shall have reg-

ularly pursued such study for not less than two months of the collegiate year then closing; a student gaining one medal not to be precluded from gaining others at the same time or subsequently.

The subjects are: Biology, Chemistry, Geology, Hygiene, Physics, Philosophy, Economics, Government, History, English, Greek, Latin, French, Spanish, German, Oratory, Composition, Logic, Algebra and Geometry, Drawing.

Trustees: The Board of Education, the President of the College, and their successors.

THE RIGGS MEDAL

In 1864, Elisha Riggs, by a gift of $1,000, established a fund the interest on which provides a gold metal to be annually awarded to the author of the best English prose composition in the senior or junior class. The subject is announced early in the year, and the essays must be handed in on the last day of recitations in May, each signed with a pseudonym and accompanied by the student's real name in a sealed envelope.

Trustees: The President of the College, the Professor of History, and the Professor of the English Language and Literature (Treas.).

THE KELLY PRIZES

In 1869, James Kelly, by a gift of $1,000, established a fund the interest on which provides two prizes for debate and literary criticism. One prize is given to the best debater in the literary societies, three contestants being chosen by the Clionian Society, and three by the Phrenocosmian. The Chairman of the Board of Trustees selects the subject and submits it to the Faculty for approval.

The other prize is given to the member of either society who shall write the best critique on some work on English literature. The subject is announced before the Christmas vacation, and the essays must be handed in on the last day of recitations in May.

The judges of the debate are selected by the Chairman of the Board of Trustees; the judges of the essays are the President of the College, the Professor of History and the Professor of the English Language and Literature.

Trustees: The Board of Trustees of the College.

THE CLAFLIN MEDALS

In 1871, John Claflin, by a gift of $1,250, established a fund the interest on which provides two gold and two silver medals, which are awarded as follows:

A gold medal to the student of the senior class electing Greek who shall pass the best competititve examination in that subject and a gold medal to the student of the senior class electing Latin who shall pass the best competitive examination in that subject, it being provided, however, that in either subject the medal may be offered to the junior instead of to the senior class, at the discretion of the Head of

the Department; a silver medal to the student of the freshman class most proficient in Greek; and a silver medal to the student of the freshman class most proficient in Latin.

Trustees: The President of the College, and Mr. George C. Lay (Treas.).

THE BELDEN PRIZES

In 1883, William Belden, by a gift of $1,000, established a fund the interest on which provides prizes for excellence in pure mathematics, the nature of the prizes and the terms of their award to be determined from time to time by the President of the College and the Professor of Pure Mathematics.

At present the prizes are awarded annually on Commencement Day, in the junior and sophomore classes, as follows:

1. A gold medal to the student in each class of greatest proficiency in the studies of the department during the year, such proficiency being determined either by the marks from recitations and examinations, or by a special competititve examination, as may seem best to the Trustees of the prize.

2. A silver medal to any other student, in either class, whose aggregate marks for recitations and examinations shall reach ninety-five per cent of the maximum.

Trustees: The President of the College, and the Professor of Pure Mathematics (Treas.).

THE KETCHUM PRIZES

In 1891, Col. Alexander P. Ketchum, of the Class of 1858, by a gift of $1,000, established a fund the interest on which provides two prizes in the history of philosophy and two prizes in political economy, the awards to be made by the professors, on the papers presented in the regular final examination.

Trustees: The President of the College, Dean Brownson, and Mr. W. Rogers Westerfield.

THE ROEMER PRIZE

In 1892, upon the death of Professor Roemer, it was found that for thirty-eight years he had provided anonymously a prize for the declamation of poetry. In recognition of this fact and in honor of his memory and name, the Roemer Prize Fund was established by a gift of $300 from a group of officers and graduates of the College. The speakers are selected from the sophomore class by competition. The declamations are delivered on the same occasion as the orations, and judged by the same judges.

Trustees: The Chairman of the Board of Trustees of the College, the President of the Associate Alumni, and Professor Saurel.

THE BENNETT PRIZE IN POLITICAL SCIENCE

In 1893, James Gordon Bennett, by a gift of $1,000, established a fund the interest on which provides a prize to be given annually

upon Commencement Day to the "member of the senior class who shall have taken the prescribed course of the institution in Political Science and English Literature, and who shall have prepared the best essay in English prose upon some subject of American governmental domestic or foreign policy of contemporaneous interest." The subjects are selected and the rules of competition announced and the decision rendered by the Faculty of the College.

Trustees: The Board of Trustees of the College.

THE RALPH WEINBERG MEMORIAL PRIZE

In 1898, Mrs. Miriam Richter, by a gift of $500, established a fund the interest on which provides an annual prize in memory of Ralph Weinberg, of the class of 1897. It is awarded to that student of the College who presents the best poem upon a topic selected by the Professor of the English Language and Literature.

Trustees: The President of the College, the Professor of History, and the Professor of the English Language and Literature (Treas.).

THE PRAGER MEMORIAL PRIZE

In 1903, William Prager, by a gift of $1,000, established a fund the interest on which provides a prize in memory of his son, David Prager, of the class of 1903, which is awarded to that member of the senior class who receives the highest aggregate mark in his studies for the senior year.

Trustees: The Chairman and the Secretary of the Board of Trustees, and the President of the College.

THE KENYON PRIZE

In 1904, Wm. Houston Kenyon, Alan D. Kenyon, and Robert N. Kenyon, all graduates of the College, by the gift of $1,000, established a fund the interest on which provides a gold and a bronze medal, to be awarded from time to time to students who attain unusual distinction in pure and applied mathematics. The trustees of the fund determine the award.

Trustees: The President of the College, the Professor of Mathematics, and Mr. Wm. Houston Kenyon.

THE GENERAL TREMAIN PRIZES

In 1909, General Henry Edward Tremain, of the class of 1860, established a trust of $5,000, to be invested in savings banks in New York, the income to be used for the two prizes; the first prize of one hundred and fifty dollars, and the second prize of fifty dollars; such prizes to be awarded annually, under rules and regulations to be made by the Faculty of the College, for the best essays on the theme, "Causes, Conduct and Conclusions of the Great Civil War in the United States." The competitors are members of the senior and junior classes, and the prizes are awarded by two judges annually selected, one by the Faculty and one by the Commander for that year of the New York Commandery of the Military Order of the Loyal

Legion of the United States; the two judges thus selected, in case they disagree as to the award, appoint a third judge.

Trustees: The President of the College (Treas.), the Professor of History, and the Professor of English.

THE JAMES R. STEERS PRIZE

In 1912, James R. Steers, of the class of 1853, established a fund of $1,000, the interest on which is devoted to the payment of an annual prize, or semi-annual prizes, for excellence in the Department of Art, the basis for such award, and the character of such award or awards, to be determined from time to time by the trustees of this Fund.

Trustees: The President of the College, the Professor of Art and the Chairman of the Board of Trustees.

THE MENORAH PRIZE

Through the generosity of the Hon. Bernard M. Baruch, of the class of 1889, the Menorah Society of the College of the City of New York offers a prize of $100 to that undergraduate student who submits the best essay on some phase of Jewish life, dealing with the literature, history, or achievements of the Jewish people. The topics and the conditions of the competition are announced by the Menorah Prize Committee.

THE MEYER COHN ENGLISH PRIZE

In 1919, Abraham Cohn, in memory of his son, Meyer Cohn, of the class of February, 1914, who was killed as a soldier in France on October 13, 1918, presented to the College a Liberty Bond of one thousand dollars, the interest of which for each half year constitutes a prize for excellence in English. It is awarded to the member of the graduating class who shall write the best English essay upon a subject selected by the Professor of the English Language and Literature.

THE BRITTAIN PRIZE IN MORAL PHILOSOPHY

In 1919, William M. Brittain, of the Class of 1917, established a prize to be awarded annually or at longer intervals, to the student writing the best essay on some phase of the development of character or moral personality. In 1922, the amount of $50 is to be awarded for the best essay upon the subject: "Ideals of Honor and Personality in Human History."

THE DIVINSKY MEMORIAL MEDAL

In 1920, the Tau Delta Phi Fraternity established, in memory of their deceased brother Jacob G. Divinsky, of the class of 1918, an annual medal to be awarded at Commencement to the senior who has made the best record in the eight prescribed courses of the department of Public Speaking.

THE ELIZA FORD MEMORIAL PRIZE

In 1921, a friend of the College offered, in "memory of a faithful and efficient public school principal in Brooklyn, Miss Eliza Ford", a prize of $100., to be awarded to the most deserving student in the school of Technology, preference being given to a resident of Brooklyn. The prize is to be awarded again in 1923.

THE HENRY E. TREMAIN SCHOLARSHIPS

In November, 1919, the Students' Aid Association established at the College ten scholarships, of amounts not to exceed $250 each, to be known as the Henry E. Tremain Scholarships. These are awarded annually to students who stand high in their studies and who are in need of some financial assistance.

TERMS AND VACATIONS

The collegiate year, aside from the Summer Session, is divided into two terms; it ends, with the Commencement in June, on the thirty-ninth Thursday after the opening of college exercises in September.

There are three vacations in each year, the summer, winter, and spring vacations being at such times as the Board of Trustees may from time to time designate. There are no college exercises on Lincoln's birthday, on Washington's birthday, on Good Friday, on Memorial Day, on Labor Day, on Columbus Day, on Election Day, or on Thanksgiving Day or the Friday following.

FEES

Tuition Fees. Certain courses of advanced or special character (with numbers above 200) chiefly in the professional schools, require the payment of fees which are specified in connection with the several descriptions of such courses. Courses listed as Special Courses, offered without credit toward degrees, are also made available at specified fees which are stated in connection with the descriptions of these courses.

Non-matriculated students are required to pay tuition fees for courses which they are permitted to pursue in the liberal curricula (which are offered free of charge to matriculated students) at the rate of $2.50 per attendance hour per week during the term.

Government employees who do not qualify as matriculated students are admitted to courses in the liberal curricula as non-matriculated students upon payment of a tuition fee of $1.25 per attendance hour per week during the term.

All students are required to pay the stated fees for special courses and for courses in the professional schools which are announced as fee courses.

Fees are not returnable except when courses are withdrawn by the College.

Registration Fee in the Evening Session. Students in the Evening Session who are pursuing courses credited toward any professional degree, diploma, or certificate are required to pay a registration fee of $2 each term, regardless of the number of courses pursued. This regulation does not apply to matriculated students who are confining their studies to the free courses of the College of Liberal Arts and Science, nor to students taking only special courses not credited toward any diploma or degree.

Other Fees. An additional fee of $1 is charged for registration after the beginning of recitations and for re-registration when a student changes his schedule of courses after it has been approved and

registered. A like fee is charged for the reissuance of any record card or for a transcript of any record other than a diploma which comes at the end of a full course of study.

Diploma charges are announced each year for candidates for certificates, diplomas, and degrees.

All students are required to pay a library service fee of 50 cents a term.

For information as to the regulation of fees in the School of Education, see page 75.

COLLEGE ASSEMBLIES

During the college term there is a regular weekly assembly in the Great Hall, at which attendance is required of students in the Day Session of the College, as in former years at the daily "chapel" exercise which was customary when the College was smaller and its programs less complex. College singing is given a prominent place at these gatherings.

PLEDGE OF LOYALTY

Each student entering the College is required,[1] at the time of entering, to sign the following pledge:

"As some small recognition of the large gift of education which, in the American spirit of freedom and self-government, is now offered me by the College of the City of New York, I hereby pledge myself as follows:

"1. I will be actively loyal in the support of constitutional government in the United States and in the State and City of New York and in this College.

"2. I will seek to preserve and even to enhance the value of all public property now or hereafter entrusted to my care.

"3. As a student I will uphold the discipline and order of the College."

STUDENT GOVERNMENT

Supervision of student activities and control of interclass functions are in the hands of a Student Council which is composed of representatives chosen by the students. Regular meetings are held at which questions concerning the welfare of the students and of the College are discussed. The results have been helpful both to the student body and to the Faculty.

LITERARY SOCIETIES

Two literary societies, the Clionian and the Phrenocosmian, have for many years been maintained by the students of the College. Mem-

[1]By resolution of the Board of Trustees, Nov. 25, 1919.

bership in these is confined to the students of the junior and senior classes. They are devoted to the cultivation of the arts of composition, oratory and debate, and the promotion of friendly intercourse between students. Weekly meetings are held during the collegiate year. These two societies annually choose the contestants for the Kelly Prize Debate.

ATHLETICS

The athletic organizations of the College are under the supervision of the Faculty Athletic Committee. This committee has adopted and published rules for the purpose of maintaining a proper academic standing among the athletes of the institution, and of securing a clean amateur policy in the various student athletic enterprises. No student is permitted to go into training whose organic condition makes such a procedure unsafe.

The executive work connected with the management of the teams and the general administrative details are conducted by an Athletic Association through a board of officers elected by the students.

This Association offers a number of opportunities to those students who desire to secure business and managerial experience in connection with athletic enterprises. The College supervision of these enterprises restricts students initiative as little as possible although a careful and persistent effort is made to secure reliable and effective business methods in all of the transactions of the Association. This supervision of business details is secured through the authority of the Faculty Athletic Committee and through the services of various instructors in the Department of Hygiene. The services of instructors from other departments are frequently utilized for this purpose.

The Stadium immediately adjoining the Hygiene Building has been equipped for both indoor and outdoor work throughout the college year.

COLLEGE PERIODICALS

Every periodical or paper published by the students, and sold or distributed by them within the College, must have printed upon it the name of the managing editor, who shall be a student.

No such periodical or paper shall be sold or distributed in the College until the President shall be satisfied that the foregoing regulation has been complied with.

It shall be the duty of the managing editor to maintain a suitable standard of intelligence, propriety and courtesy, and he will be held responsible for the performance of this duty.

No periodical or paper, whose managing editor has been adjudged by the President or Faculty of the College to have failed to conform with this principle, shall be sold or distributed in the College while he remains the editor.

The rules of the Board of Trustees in regard to societies in the College shall apply to all student publications.

THE STUDENTS' AID ASSOCIATION

In 1857 the Associate Alumni established a fund for the purpose of granting pecuniary aid to such students as might otherwise find difficulty in completing their College course. This fund is maintained by contributions from the alumni. In 1865 the Students' Aid Association was incorporated under the laws of the State of New York. The management of the fund is committed to five trustees, who loan, without interest, such sums as they think proper to deserving students. Neither the names of those to whom the loans are made, nor the amounts of the loans are known to any but the trustees and the auditors of the fund. In November, 1919, the Association established the Henry E. Tremain Scholarships, which are described on page 89.

Further information may be obtained by consulting any one of the trustees.

The following are the present trustees:

John R. Sim, '68, President.....536 West 156th Street.
Edmund Burke, '90, Treasurer.....Room 224, College.
Alfred D. Compton, '97, Secretary.....Room 116, College.
Sigmund Pollitzer, '79.....1 West 70th Street.
Wm. Houston Kenyon, '76.....61 Broadway.

THE COMMITTEE ON EMPLOYMENT

In view of the large number of students of the College who contribute toward their own support, a Committee on Employment has been appointed from the Faculty. The Committee maintains an Employment Bureau with an office in Room 305A, Main Building (telephone Audubon 1280). The Bureau not only places men in positions of all kinds, permanent as well as temporary, but also takes note of their scholarship in order that their outside work may not interfere unduly with their studies. The services of the Bureau are at the disposal of all students of the College.

Until March 1, 1918, all the expenses of the Bureau were defrayed by the Faculty, the alumni, and other friends of the College. On that date the Bureau came under the general direction of the Students' Aid Association, the Faculty having accepted a scheme of control and co-operation proposed by the Association. Generous gifts by friends of the College supplemented by appropriations by the Association have enabled the Bureau to employ an experienced manager.

No fee is charged to the students, but the faithful performance of work secured for them is required.

THE CITY COLLEGE CO-OPERATIVE STORE

In September, 1916, by authority of the Board of Trustees, a committee composed of three members of the student body and four mem-

bers of the Faculty opened a Co-operative Store. The details of the business are carried on by a student manager and student salesman. The Store sells books, stationery, athletic supplies and all manner of articles needed by the students in their college work. The Store attempts to make only such profits as will enable it to pay expenses, provide against losses and build up a small working capital.

COURSES IN THE SEVERAL DEPARTMENTS

Each of the following courses is offered each term, unless another arrangement is specified.

Courses marked with an asterisk are offered in the Evening as well as in the Day Session, during the year 1921-1922. *Courses marked* (†)*are offered* only *in the Evening Session. Courses marked* (ˢ) *were offered in the Summer Session of* 1921.

Courses numbered from 1 *to* 100 *are free courses offered by the College of Liberal Arts and Science. Those numbered* 101 *to* 200 *are courses offered, also without charge for tuition, by the Schools of Technology, Business and Civic Administration, and Education. Courses numbered from* 201 *to* 300 *are courses for which fees are charged, as indicated in the several descriptions.*

ART

The work in this department includes courses in the following subjects: freehand drawing, mechanical drawing, descriptive geometry, shades and shadows, perspective, aesthetics, and the history of modern art.

The courses in freehand drawing aim to give the student the knowledge and skill required for a correct reproduction of geometrical forms, and of artificial and natural objects, and by this training to develop his perceptive faculties in the just appreciation of lines, forms, proportions, light and shade, color values, etc. In the advanced course attention is given to the further development of taste, to the elements of design, and to the use of color. These courses, in connection with the work in aesthetics and the history of art, give preparation of special value to those who aim to become teachers of drawing, writers on art, or museum employees.

The courses in mechanical drawing and descriptive geometry are planned with especial relation to the requirements of subsequent technological work, particularly the study of the engineering professions and architecture.

The course in aesthetics and the history of modern art embraces a brief consideration of the philosophy and psychology of art and its bearing upon human life. The history of the evolution of the various forms of historic art, in architecture, sculpture, painting, and the other graphic arts, together with their relation to general history, is given in a series of fully illustrated lectures, and visits are made to the Metropolitan Museum of Art and to the various large galleries at which special exhibitions are held.

The casts belonging to the department are very fine, most of them having been taken from early moulds. The collection contains many beautiful examples of the Phidian era, the most notable being a large number from the Frieze of the Parthenon, and a few of the best preserved Metopes, the heroic statues of Theseus and Cephisus and a Caryatid from the Erectheum. These copies of the Elgin Marbles were given by Charles M. Leupp, Esq. There are, furthermore, the busts of Jupiter from Otricoli, the Venus of Milo, the Venus of Arles, Juno, the Hermes, the Apollo Belvedere, the Belvedere Torso and examples of the work of Michael Angelo, Cellini and Thorwaldsen.

This department also makes use of a collection of about 275 photographs, the gift of the Class of '75, illustrating the architecture and sculpture of the Greeks and Romans, early Christian and Renaissance painting in Italy and a number of the most noted buildings of all European countries. Each photograph is marked with the name, the date of production and the present location of the subject represented. East Indian, Egyptian, Romanesque and Gothic architecture are likewise illustrated by a number of photographs purchased by the College; and a collection of over 500 lantern slides is used in the lectures on the history of the fine arts.

s*1-s*2. Descriptive Geometry and Mechanical Drawing. *Professors Hunt, Neus, Autenrieth, and Kelly.*

The course in descriptive geometry aims to familiarize the student with the means afforded by this applied science and art for complete graphic expression of forms and their relation in space; further, to develop his projective imagination, as well as to habituate him to accuracy, clearness and neatness in execution.

It consists of lectures, recitations, and practice on problems in descriptive geometry involving lines, planes, surfaces, solids; their relations, tangencies, intersections, and development. The 1st and 3d angle methods of mechanical drawing are derived from the principles of descriptive geometry, and are illustrated by working drawings of simple constructions.

Prescribed for students in Science; elective for others. Two terms; four hours a week; 4 credits.

11. Shades, Shadows and Perspective. *Professor Hunt.*

Theory of shades and shadows. Shadows of mechanical and geometrical objects on planes; of solids on solids with special reference to rendering of mechanical and architectural drawings.

Theory of perspective; its basis in descriptive geometry. Discussion of and practice in the vanishing and division point method, and in the so-called ground-plan and "office" methods. All of Art 11 is given with reference to work pursued later by those electing Art 115-116 and 117.

Prerequisite: Art 1-2. Fall term, six hours a week; 2 credits.

21. Freehand Drawing. *Professor Hunt.*

Instruction and practice in freehand drawing and applied pictorial perspective, with special view to the needs of future teachers of drawing, as well as to the making of graphic notes or records in connection with chemistry, physics, or biology.

Four hours a week; 2 credits.

22. Advanced Freehand Drawing. *Professor Hunt.*

Drawing from casts, natural objects, articles of glass, pottery, etc., involving the rendering in black and white of color values; from casts of the human figure in part or entire; practical application of perspective; the elements of decorative design; the use of water color, and instruction in the teaching of art. The course, in connection with 31-32, Aesthetics, enables the student to prepare for the intelligent and effective teaching of art.

Four hours a week; 2 credits.

23-24. Poster Design and Advertising. *Professor Schulman.*

Principles of decorative design and practice in technique in the various media used in commercial art. Book-cover and page decoration, poster design, lettering and the methods of photo-engraving and color processes of reproduction constitute the essential part of the course. Visits are made to advertising, lithographic and printing establishments.

Prerequisite: evidence of ability in drawing sufficient to warrant admission to the course. Two terms, four hours a week; 2 credits per term; offered in alternate years, 23 to alternate with 115, and 24 with 116. (Not given in 1921-22.)

25. Still-life Drawing and Painting. *Professor Kelly.*

Still-life rendering in black and white, oil monochrome followed by practice in oil painting in full chromatic values. Theory of color harmony and contrast. Practice in the various media used in painting, water color, opaque water color, pastel and tempera. Stress is laid on pictorial composition, beauty of line, light and shade, balance and composition.

Fall term. Prerequisite: evidence of ability in drawing sufficient to warrant admission to the course. Four hours a week; 2 credits.

31-32. Aesthetics and the History of Modern Art. *Professor Hunt.*

Lectures on the history of painting and other graphic arts, sculpture, architecture, and the minor arts; the place of the fine arts in the history of civilization; the appreciation of art; historic ornament. The course aims to give the student such comprehension of the subject as is essential to a liberal education; it has special value for those who may devote themselves to teaching, to writing or criticism in connection with art, or to other pursuits requiring knowledge and

training in matters of taste. Students have special privileges for visiting the Metropolitan Museum of Art, and are invited to the galleries where important exhibitions of old and new masters are held.

Two terms, beginning in fall, two hours a week each term; 3 credits.

*112. Mechanical Drawing. *Professor Autenrieth.*

The course in mechanical drawing begins with instruction and practice in the use of instruments and the making of working drawings for constructions of various kinds. The practical requirements of the modern workshop are always kept in view.

The work of this course embraces drawings of mechanical details, such as bolts and nuts, screws, springs, keys, pipe fittings, etc.; methods of dimensions, tracing, etc.; making of scale-drawings from sketches of parts of machines; also the drawing of details from "assembly" drawings as a drill in the reading of drawings. Text-book: French, *Engineering Drawing.*

Prerequisite: Art 1-2. Six hours a week; 2 credits.

*113. Topographical Drawing. *Professor Autenrieth.*

Study of signs employed in making topographical maps fully rendered. Plotting; particular attention being given to contour maps and the solution of problems relating thereto. The student is also required to plot the surveys made in the field during his course in practical surveying.

Prerequisite: Art 1-2. Co-requisite: CE101. Fall term, six hours a week; 2 credits.

115. Architectural Drawing. *Professor Neus*

The classic orders and brush rendering. The proportions of the orders are studied from Ware's *American Vignola;* they are rendered in India ink outline as well as in India ink and color wash. Shadows are constructed by the student.

Prerequisite: Art 1-2. Fall term, three hours a week; 1 credit. (Offered in 1921-22.)

116. Architectural Drawing. *Professor Neus.*

Continuation of Course 115 with application of the orders to elementary architectural designs.

Prerequisite: Art 115. Spring Term, three hours a week; 1 credit. (Offered in 1921-22.)

117. Architectural Drawing. *Professor Neus.*

Drawings of architectural constructions and various types of house framing. Full brace, balloon and combination frames showing posts, girders, sills, plates, braces, beams, studding and rafters. Construction of window and door openings, framing for stairs and

chimneys, dormers, hips and valleys. The various kinds of joints used in wood framing and the construction of roof-trusses will be thoroughly considered. This course is complete in itself, but also constitutes the first step for students choosing architecture as a profession.

Prerequisite: Art 1 or equivalent work. Four hours a week; 2 credits.

132. Appreciation of Modern Art. *Professor Hunt.*

Offered in the School of Education, this course is substantially the same in content as Art 32.

Thirty hours, thirty weeks; 2 credits. Main Building. Open freely to auditors; for students desiring credit, registration fee, $2.50.

201. Advanced Mechanical Drawing and Elementary Machine Design. *Professor Autenrieth.*

A continuation of Course 112, including the proportioning of machine parts by empiric formulas. Modern practice in making, recording and filing shop drawings of machine details and assemblies. Use of standard connections and the interpretation of shop notes on drawings. Forms of machine parts as indicated by the nature of the resistances to be overcome by the characteristics of the material. Proportioning of parts by the use of modern empirical formulas derived from practical considerations, the method of arriving at these formulas and the limiting conditions in their use. Text-book: Marshall, *Elementary Machine Drawings and Design.*

Spring term, six hours a week; 2 credits. Fee, $15.

213. Structural Drafting. *Professor Neus.*

Drafting of structural steel details. Standard rolled sections. Use of steel handbooks. Conventional riveting. Symbols. Floor framing plans. Standard connections. Beams and columns. Rivet spacing. Plate girders. Roof trusses. Bridge members.

Six hours a week; 2 credits. Fee, $15.

221. Pictorial Representation and Design: Method and Content. *Professor Schulman.*

This course considers the elementary curriculum in drawing and design, the various methods of teaching important principles, of developing skill in execution and of inculcating appreciation of the aesthetic in line and color. A coordinate aim is to develop in teachers greater skill in drawing through abundant practice. Suitable exercises in the principles of free hand drawing, working drawings and design will be given for class and home work. Provision is also made for practice in the various media.

Sixty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50; tuition, $10; materials, $2.50.

222. Advanced Representation and Design: Method and Content. *Professor Schulman.*

This course continues the aims and methods of the first course. The subjects studied are selected, as far as time and the capacities of the students permit, from the following:

Advanced Representation.—Pencil and charcoal rendering; drawing from the antique; artistic anatomy; theory and practice of mechanical perspective; principles of pictorial composition; technique of oil painting; drawing from life.

Advanced Decorative Design.—Principles of design; use of plant, animal and landscape forms as motives in decoration; technique of clay modelling, leather-tooling, stenciling and wood block printing; lettering; book cover designs; trade marks; monograms; bookplates; poster design.

Advanced Constructive Design.—Construction drawing; furniture design; design for utensils.

Sixty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $10; materials, $2.50.

Comparative Literature and Art (English 41-42)

This course offers a general view of ancient, mediaeval and modern literature and art. There are two lectures and one recitation each week; note-books will be examined and reports will be required on assigned reading and on objects of art. For details see page 162.

Prerequisite: English 3 and one year of college work in a foreign language. Either this course or a third language is prescribed for Arts students; elective for others. Two terms, three hours a week; 6 credits.

BIOLOGY

s*1. General Biology. *Professor Scott.*

This course deals with the fundamental laws and principles which underlie all the biologic sciences. The structure, functions, development, behavior and history of living things are discussed and in addition studied in the laboratory by the use of selected types. This course furnishes the necessary basis for more advanced work in botany and zoology. Text-book: Conn's *Biology*.

Prescribed; two lectures, one recitation and four laboratory hours a week; 4 credits.

Students wishing to take elective courses should consult the chairman of the Department.

11. Plant Morphology. *Mr. Ruckes.*

A study of the structure and life histories of representative plants from the more important groups; histology of plant organs; problems of sex; problems of evolution and heredity; a study of plant relationships and classification. Field study. Preserving and mounting of plant specimens.

Spring term; one lecture, one recitation and four laboratory hours a week; 3 credits.

12. Physiology of Plants. *Mr. Ruckes.*

Lectures, laboratory and field work on the conditions affecting the life of plants, their physical and mechanical properties, metabolism and the formation of sugars, starch, cellulose, tannin, glucosides, oils, fats, organic acids, etc. Experiments include problems relating to respiration, nutrition, absorption and movement of water and gases, food distribution, response to stimuli, growth, effect of environment, and reproduction. Practical work in the study of soils, fertilizers, seed testing, variation, etc., is included.

Fall term; one lecture, one recitation and four laboratory hours a week; 3 credits.

*13. Applied Botany. *Mr. Ruckes.*

Is designed as a foundation for practical economic botany. Lectures and laboratory work will refer to the more important plants used in the arts and industries. The characteristics, comparative utility and commercial value of foods, textiles, building materials and other plant products are studied. Field work consists of visits to mills and factories.

Spring term; one lecture, one recitation and four laboratory hours a week; 3 credits.

21. Theoretic Biology. *Professor Goldfarb.*

The fundamental principles involved in recent studies of evolution, heredity, experimental embryology, adaptation and variation are studied by lecture and discussion. This course is intended for students not specializing in biology. The work is intermediate in character between the elementary introductory course (Biology 1) and the technical courses (27 and 28) designed for students specializing in biology.

Spring term; three hours a week; 2 credits.

22. Invertebrate Zoology. *Professor Goldfarb.*

This course gives an opportunity of studying, in the invertebrate animals, the anatomical and functional principles which form the ground-work for understanding the vertebrates. Especial attention is given to forms which transmit or cause disease in man, domestic animals, and plants. The course is designed to prepare students for the consideration of contemporaneous problems in experimental biology and medicine.

One lecture, one recitation, and four laboratory hours a week; 3 credits.

s*23. Vertebrate Zoology. (Comparative Anatomy.) *Mr. Ruckes.*

This course consists of lectures on the relationships of the various groups of vertebrates, the comparative anatomy of various systems of organs, and questions relating to the origin and evolution of the different groups. The keynote to the course is the history of the human body in the larger sense of the word. Opportunity for the development of technique in dissection is afforded by the laboratory work.

Two lectures, one recitation, and four laboratory hours a week; 3 credits.

*25. Histology. *Professor Martin.*

The microscopic study of the various tissues and organs of the vertebrate body. A great part of the time, however, is spent in acquiring a good technique in making microscopical preparations of all kinds.

Fall term; one lecture, one recitation, and four laboratory hours a week; 3 credits.

s*26. Embryology. *Professor Martin.*

The lectures treat of the general processes of animal ontogeny such as formation of sex cells and fertilization. Laboratory work consists in the study of selected stages in the development of the frog, chick and pig.

Spring term; one lecture, one recitation, and four laboratory hours a week; 3 credits.

27. **Experimental Biology: Heredity, Etc.**
Professor Goldfarb.

This and Course 28 are intended for advanced students specializing in biology or related sciences. The larger problems of biology are critically studied, in their historical development and in the light of recent experimental researches, with collateral readings, discussion, lectures, and special work upon a selected problem. Course 27 includes some or all of the following topics: variation, mutation, selection, heredity, acquired characters, influence of environment and experimental evolution, and their applications to man.

Prerequisite: Biology 1 and 22. Fall term; three seminar hours and four laboratory hours a week; 3 credits.

28. **Experimental Biology: Growth, Etc.** *Professor Goldfarb.*

This course, which may be taken independently of Course 27, includes some or all of the following topics: growth, regeneration, transplantation, growth in vitro, cancer, experimental embryology, sex determination and animal behavior, and their application to man.

Prerequisite: Biology 1 and 22. Spring term; three seminar hours and four laboratory hours a week; 3 credits.

*32. **Elements of Physiology.** *Professor Scott.*

This course deals with the general concepts of the science of physiology, the chemical and physical conditions which underlie and determine the action of the individual organs, and the integrative relationship of the parts of the body.

One lecture, one recitation and four laboratory hours a week; 3 credits.

33. **Special Physiology.** *Professor Scott.*

A study of the fundamental facts of physiology and methods of investigation. The aim is to give a complete study of certain topics; the phenomena of contraction, conduction, sense perception and the various mechanisms of general metabolism. Laboratory work is arranged to show the methods of physiologic experimentation and to emphasize the necessity of using care and accuracy in their application.

Spring term, two lectures and three laboratory hours a week; 3 credits.

34. **Physiology of Nutrition.** *Professor Scott.*

The aim of this course is to study broadly the metabolism of the human body. In the development of this plan the following topics will be considered: the food requirements of man, the nutritive history of the physiologic ingredients, the principles of dietetics and their application to daily living.

Fall term, two lectures and three laboratory hours a week; 3 credits.

*41. General Bacteriology. *Professor Browne.*

Lectures, recitations and laboratory work introducing the student to the technique of bacteriology and to the more important facts about the structure and function of bacteria. Special applications of bacteriology to agriculture and the industries are discussed and brief references are made to the activities of allied microbes, the yeasts and molds. The general relations of bacteria to disease and the principles of immunity and its control are included.

One lecture, one recitation and four laboratory hours a week; 3 credits

*142. Bacteriology of Foods. *Professor Browne.*

This includes the bacteriologic examination of water, sewage, air, and milk and other food products, together with the methods used in the standardization of disinfectants, a detailed study of yeast and bacterial fermentations and their application to the industries. Numerous trips to industrial plants are made.

Prerequisite: Biology 41. Fall term, one lecture and six laboratory hours a week; 3 credits.

*143. Bacteriology of Pathogenic Micro-organisms. *Professor Browne.*

A course devoted to the laboratory methods of biology as applied in the state and municipal boards of health. Practice is given on the methods used for the diagnosis of diptheria and tuberculosis, together with a detailed study of the groups to which they belong.

Prerequisite: Biology 41. Spring term, one lecture and six laboratory hours a week; 3 credits.

*244. Potable and Industrial Water, and Sewage. *Professor Browne.*

This course is offered in co-operation with the Department of Chemistry, and is identical with Chemistry 249. See page 112.

Prerequisite: Chemistry 4 and Biology 41. Chemistry 260 is desirable. Spring term, seven hours a week; 3 credits. Fee, $17.50.

*148. Municipal Sanitation. *Professor Browne.*

Lectures, discussions and visits to public works of special importance. The principles which underlie a pure water supply and the means by which the wastes of the city, its sewage and garbage, may be successfully disposed of, and the problems of pure milk and pure food supplies, the housing question with its special phase of ventilation and plumbing, and the methods by which a municipal board of health is organized to fight tuberculosis and other specific diseases will be studied.

Fall term, two lectures and one field trip a week; 3 credits.

*149. Municipal Sanitary Inspection.

Professor Browne and Bureau of Foods and Drugs, New York City Department of Health.

The seminar work of this subject is done in the College; the field work in company with and under the direct supervision of an Inspector of the Department of Health of the City. The course is limited to six students each semester, and is intended for those planning to go into this branch of the City's service. The qualifications are based upon individuality, personality playing a prominent part.

Prerequisite: Biology 41 and 148 and Chemistry 159. Spring term, two seminar hours, one recitation and one inspection tour a week; 3 credits. (This course is identical with Chemistry 195.)

51. Research Work.

Seniors who have completed satisfactorily a sufficient amount of work in the department may be assigned a topic to serve as a basis for a thesis which will be submitted for credit at the completion of the work. The student will receive the advice of the instructor in the subject in which the research falls, but is expected to do as much independent work as possible. The purpose is to introduce the student to research methods and also to foster independence.

See also among **Special Courses:**
Dental Bacteriology (page 226). *Professor Browne.*

The library of the department, in Room 316, is open to all students during college hours. It contains over one thousand volumes on the various biologic subjects. Several private funds are available for developing the library, most important of which are the Steers Fund for books and the Warburg Fund for the purchase of journals.

The museum of the departments of Biology and Geology contains many rare and valuable specimens used in the biological courses.

CHEMISTRY

Note.—Physics 1 *and* 2 *are prerequisite for all work in Chemistry.*

A deposit to secure excess breakage, etc., is required of all students taking courses in Chemistry.

A special department certificate may be acquired by completing courses 1, 2, 3, 4, 111, 20, 33, 44, 50, 55, *and* 70, *with an average of at least* 80 *per cent. or B grade, and on acceptance of a satisfactory report of research prosecuted in one of the departmental divisions* (*Chemistry* 100).

s*1-s*2. Descriptive Chemistry.
Professors Baskerville and Estabrooke, and Mr. Babor and Assistants.

For the student's general culture, acquainting him with the principles of chemical philosophy. Of the thirty-two weeks, most of the time is given to the study of inorganic chemistry, essentially based upon the natural system, but involving the most modern conceptions of physical chemistry. During the second term, when the student has gained sufficient knowledge to appreciate it, parallel reading is assigned in the history of chemistry. The lectures are accompanied throughout the session by weekly recitations or examinations and laboratory work. Text-books: Baskerville's *Inorganic Chemistry,* Smith's *Laboratory Outline of College Chemistry,* Baskerville and Estabrooke's *Progressive Problems in Chemistry,* and Venable's *Short History of Chemistry.*

Prescribed. Two terms; one recitation, two lectures and three laboratory hours a week; 6 credits. The privilege of a limited amount of extra laboratory work is extended to those who wish to avail themselves of the opportunity.

s*3. Qualitative Analysis I. *Professor Curtman and Assistants.*

The reactions of the common metals and the more familiar acids are studied from the standpoint of the ionic theory and the mass action law. Laboratory experience is gained in the methods of the systematic analysis of unknown solutions and simple solid substances, emphasis being placed upon the quantitative feature. Text-books: Curtman's *Preliminary Experiments in Qualitative Analysis,* and Baskerville and Curtman's *Qualitative Analysis.*

Prerequisite: Chemistry 1-2. Prescribed for students in Science; elective for others. Laboratory work with a lecture or recitation every week; seven hours a week; 3 credits.

Students wishing electives should consult the head of the Department.

s*4. Quantitative Analysis I. *Professor Curtis and Assistants.*

Introductory lectures, problem work and laboratory exercises consisting of analyses typical of the subdivisions of the subject, both

gravimetric and volumetric, and including some practice in separations.

Elective, but must be taken by all students intending to take further courses in Chemistry. Prerequisite: Chemistry 3. Lecture or recitation one hour; laboratory work seven hours a week; 3 credits.

Further elective courses in Chemistry may be taken only by those students who have acquired a grade of C or higher in both Chemistry 3 and 4. Continued privilege of electives is contingent upon maintaining a minimum grade of C.

***20. Physical Chemistry.** *Professor Stevenson.*

The lectures cover the entire field of physical chemistry except electro-chemistry, and are supplemented by problems and parallel reading. The laboratory practice includes such topics as standardization of apparatus, thermostats, determinations of molecular weights, viscosity, index of refraction, vapor pressure, velocity of reaction, etc. Special experiments are also laid out for students who indicate a desire to prepare for some particular line of work. Text-books: Walker's *Introduction to Physical Chemistry* and Findlay's *Practical Physical Chemistry.*

Prerequisite: Chemistry 4; Mathematics 5 is desirable. Lectures three hours, and four laboratory hours a week; 3 credits.

***70. Electro-Chemistry.** *Professor Stevenson*

The lectures are upon theoretical and industrial electro-chemistry, and are supplemented by problems and parallel reading. The laboratory practice includes such topics as conductivity, electrolysis, electro-plating, electro-analysis, decomposition voltage, electrolytic reactions and electric furnace syntheses. Text-books: Le Blanc's *Electro-Chemistry* and Findlay's *Practical Physical Chemistry.*

Prerequisite: Chemistry 4; Mathematics 5 is desirable. Lectures two hours, seminar one hour, and four laboratory hours a week; 3 credits.

s*50. Organic Chemistry, I. *Professor Prager and Mr. Meltsner.*

The fundamental principles involved in the chemistry of carbon compounds are studied. The lectures and recitations deal mainly with the aliphatic series and their derivatives, but at the end of the term a few lectures are devoted to the cyclic series to indicate the lines followed in Chemistry 55. The laboratory practice includes the preparation, examination, and identification of typical aliphatic compounds. The quantitative factor is emphasized. Text-books: Norris' *Organic Chemistry* and Norris' *Experimental Organic Chemistry.*

Prerequisite: Chemistry 4. Lectures and recitation three hours, and laboratory four hours a week; 3 credits.

***55. Organic Chemistry, II.** *Professor Prager and Mr. Meltsner.*

A continuation of Chemistry 50. The lectures and recitations deal with the cyclic and more complex carbon compounds, showing

their general significance in living processes, in medicine and in the industries. The laboratory work includes the preparation of cyclic compounds and the quantitative determination of carbon and hydrogen. Text-books: Same as in Chemistry 50, and Gatterman's *Practical Methods of Organic Chemistry*. Preparations are assigned from other works or the journals.

Prerequisite: Chemistry 50. Lecture and recitation two hours and five laboratory hours a week; 3 credits.

*33. Qualitative Analysis, II. *Professor Curtman.*

An extension of Chemistry 3, with which it constitutes one year of Qualitative Analysis. The course is intended for those who wish to specialize in chemistry or to secure advanced standing in a university. It deals with the systematic study of the acids and their detection in complex mixtures; analysis of alloys, mixtures of rarer elements, and industrial products. Text-books: Curtman's *Preliminary Experiments in Qualitative Analysis,* Baskerville and Curtman's *Qualitative Analysis,* standard works of reference and current journals.

Prerequisite: Chemistry 4, or this may be taken at the same time. The subject may be taken concurrently with any other elective in the Department, except 100, but the maintenance of a grade of C in the other electives is required to receive rating in 33. Lecture or recitation, one hour; laboratory practice nine hours and library two hours a week; 4 credits.

*44. Quantitative Analysis, II. *Professor Curtis.*

An extension of Chemistry 4, with which it constitutes one year of Quantitative Analysis.

Lectures presenting both theory and practice with special reference to recent approved methods in keeping with modern technique. The laboratory work includes determinations of phosphates, titanium, carbon dioxide, the important minor constituents of steel, as phosphorus, sulphur, silicon, etc., analysis of bronzes and of an ore. The course as laid out allows the student to acquire advanced standing in a professional school or university. Text-books: Gooch's or Talbot's *Quantitative Analysis.*

Prerequisite: Chemistry 4. The subject may be taken concurrently with any other elective in the Department, except 100. Lecture or recitation, one hour; laboratory practice eleven hours a week; 4 credits.

*260. Applied Inorganic Chemistry.

Professor Moody and Assistant.

A foundational course in Applied Chemistry, in which lectures and laboratory practice are given on such subjects as use of fuels, technical evaporation, filtration and crystallization, the most important acids and alkalis, the soil, fertilizers, nitrogen industries,

refrigeration, etc. Parallel reading is assigned in standard works of reference and in current technical journals.

Prerequisite: Chemistry 4. Fall term; lectures and recitations two hours, and five laboratory hours a week; 3 credits. Fee, $17.50.

261. Practice in Applied Inorganic Chemistry.

The work is an illustration of the application of the principles considered in Chemistry 260. Typical manufactures (as sulphuric, nitric and hydrochloric acids, and fertilizers) are closely studied, but attention is directed to basic principles as observed in the plants visited. Reports, sketches, and in some instances finished drawings are required. Most of this work is scheduled for Saturdays. Previous studies of plants, or factory experience, may be accepted in lieu thereof.

Prescribed for students in Chemical Engineering; open to others pursuing Chemistry 260, but without credit. Prerequisite: Art 112 and 201, Chemistry 4 and 260 (concurrently), and M.E. 122. Fall term (beginning 1923); 1 credit. Fee, $7.50; students must bear the expenses incident to the excursions.

*265. Applied Organic Chemistry.

Professor Moody and Assistant.

Lectures and laboratory practice are given on such subjects as commercial preparation of hydrocarbon gases, coal gas, and water gas, coal tar products, fibres and textile industries, starch and cellulose products, animal industries, oils, gums, soaps, sugar, etc. Text-books: Sadtler's *Industrial Organic Chemistry,* Roger's *Laboratory Guide to Industrial Chemistry.* Parallel reading is assigned in Nagel's *Mechanical Appliances of Chemical Industries and Lay-out, Design and Construction of Chemical Plants,* and in current technical journals. Experts from different industries give some of the lectures.

Students are advised, although not required, to take 260 and 265 in numerical sequence.

Prerequisite: Chemistry 4 and 50. Spring term; lectures and recitations two hours, and five laboratory hours a week; 3 credits. Fee, $17.50.

266. Practice in Applied Organic Chemistry.

Given in connection with Chemistry 265, and similar in character to Course 261, q.v. The special industries studied in detail are the manufacture of commercial hydrocarbon gases, intermediates, dyestuffs, and coal tar products. Text-books: Cain's *Intermediate Products,* Wagner's *Coal Gas Residuals,* Price's *The Modern Factory.*

Prescribed for students in Chemical Engineering; open to others pursuing Chemistry 265, but without credit. Prerequisites as for 261, substituting 265 for 260. Spring term (beginning in 1924); 1 credit. Fee, $7.50; students bear the expenses incident to the excursions.

280. Chemistry of Metals (Ferriferous). *Professor Moody.*

Such topics as fuels, cement, concrete, refractories, furnace building materials and the construction of typical furnaces, heat measurements, general metallurgical processes, especially cast and wrought iron, and steel are considered. The several subjects are studied practically in the laboratory. Text-books: Tarr's *Economic Geology,* Stoughton's *Metallurgy of Iron and Steel,* McFarlane's *Practical Metallurgy.*

Prerequisite: Chemistry 4. Prerequisite or co-requisite: C.E. 110. Fall term; seminar and recitations two hours and five laboratory hours a week; 3 credits. Fee, $17.50.

281. Practice in the Chemistry of Metals (Ferriferous).

Given in connection with Chemistry 280, and similar in character to Course 261, q.v.

Prescribed for students in Chemical Engineering; open to others pursuing Chemistry 280, but without credit. Prerequisites as for 261, substituting 280 for 260. Fall term; 1 credit. Fee, $7.50; students bear the expenses incident to the excursions.

288. Chemistry of Metals (Non-Ferriferous).

Professor Moody.

The treatment of ores other than those of iron for the winning of metals, their subsequent working for various uses, as in coinage, alloys, electroplating, etc. The several steps are accompanied by practical verification in the laboratory, together with fire-assay work. Text-books: McFarlane's *Practical Metallurgy,* Hoffman's *Metallurgy of Copper,* Hiorn's *Mixed Metals,* and Lodge's *Notes on Assaying.*

Prerequisite: Chemistry 4, 280. Spring term; seminar and recitations two hours, and five laboratory hours a week: 3 credits. Fee, $17.50.

289. Practice in the Chemistry of Metals (Non-Ferriferous).

Given in connection with Chemistry 288, and similar in character to Course 261, q.v.

Elective for students in Chemical Engineering; open to others pursuing Chemistry 288, but without credit. Prerequisites as for 261, substituting 288 for 260. Spring term; 1 credit. Fee, $7.50; students bear the expenses incident to the excursions.

*146. Municipal Chemistry (Technical Analysis).

Instructor to be announced.

Special practice in standard methods of analysis of products purchased by the City (as coal, soap, paint, and oils, lubricating oils and greases, asphalt, cement and paper), accompanied by a study of applications and specifications. This course is given in co-operation with the Central Testing Laboratory of the City, members of whose staff give some of the lectures and participate in the seminars. Text-

books: Baskerville's *Municipal Chemistry,* standard works of reference, current journals and the instructor's notes.

Prerequisite: Chemistry 50. Eight laboratory hours a week; 3 credits.

*195. Municipal Sanitary Inspection.

This course is identical with Biology 149; see page 105 for description.

Prerequisite: Biology 41 and 148, and Chemistry 159. Spring term, two seminar hours, one recitation and one inspection tour a week; 3 credits.

*159. Food Inspection and Analysis.

Instructor to be announced.

Special practice in the analysis of food products and drugs the sale of which is controlled by the City, milk, butter, cereals, beverages, etc. Occasional lectures and excursions. This course is given in co-operation with the Food and Drug Inspection Laboratory of the Department of Health.

Text-books: Winton's *Course in Food Analysis* and the instructor's notes.

Prerequisite: Chemistry 50. Fall term; eight laboratory hours a week; 3 credits.

299. The Chemistry of Food and Nutrition.

Food principles, their chemistry and functions; composition and nutritive values of food materials; the amounts of food required in nutrition; chemical methods of determining the nutritive values of foods; standards for food products; vitamines.

Prerequisite: Chemistry 50; Chemistry 55 is desirable. Spring term; lectures and laboratory seven hours a week; 3 credits. Fee, $17.50.

*246. Technology of Fuel and Gas.

Professor Stevenson and Assistant.

Analyses and tests of solids, liquids, and gases to determine their fitness and value as combustible and explosive fuels. Fuel value determinations with calorimeters. Study and classification of fuels, their properties and the methods of using them. The standard methods of gas analysis. Standard texts.

A—Solids—First five weeks.

B—Liquids—Second five weeks.

C—Gases—Third five weeks.

Prerequisite: Chemistry 4. Fall term; lectures and laboratory work eight hours a week; 3 credits. Fee, $20.

Regular students may take only the complete course. Municipal students may elect any or all of the subdivisions.

*249. Potable and Industrial Water, and Sewage.

Professor Browne and Instructor to be announced.

This course, which is identical with Biology 244, differentiates between various waters, considering them from industrial and hygienic standpoints; for example, softening, filtering and purifying. Water analyses are made in laboratory. The work is divided into three groups.

A. Industrial Water
B. Potable Water } Given in the Chemistry Department.
C. Water Bacteriology. Given in the Hygiene Department.

Prerequisite: Chemistry 4 and Biology 41; Chemistry 260 is desirable. Spring term; lectures and laboratory seven hours a week; 3 credits. Fee, $17.50. Municipal students may elect any or all of the three divisions.

269. Chemistry and Commerce. *Instructor to be announced.*

In general this course involves the economics of the production and disposition of chemical products. It treats of the sources of raw materials utilized in the chemical industry; directs attention to the countries from which raw, intermediate, and finished products may be imported or to which they may be exported; it treats of the methods by which such materials are made ready for handling in shipping, the channels through which the crude materials may be obtained and finished products disposed of. The lectures also consider the problems of sources of energy and conservation of wastes in the utilization of by-products. The patent laws involved receive due consideration.

Seminar work on the economic history of the development of various chemical industries, domestic and foreign, is carried on by the study of the consular reports and through the use of the Wolcott Gibbs, Chemists' Club, and New York City Libraries. Selected reports, prepared by students, are presented by them to the class for criticism and comment.

Prerequisite: a knowledge of chemistry equivalent to Chemistry 260 and 265 of the College Course. Spring term; lectures, seminar and library, five hours; 2 credits. Fee, $12.50.

262. Industrial Chemistry for Engineers other than Chemical Engineers.

Professor Moody.

This is a lecture and seminar course (with parallel reading) especially adapted for students who aim to become civil, electrical, or mechanical engineers. Its purpose is, without going deeply into chemical manufacturing, to show the chemistry involved in a limited field of engineering, especial emphasis being laid upon apparatus types used in selected processes. Such topics as metallic corrosion

and its prevention, paints (composition and service), wood preservation, cements, water-proofing, fire prevention and fire-proofing, asphalts, oils, and abrasives, which serve as illustrations of the subjects of importance to all engineers, are studied.

This course is open only to those students pursuing the curricula leading to the degrees of Civil, Electrical and Mechanical Engineer, and to qualified *Municipal Students.*

Prerequisite: Chemistry 3. Fall term; lectures three hours a week with assigned reading; 3 credits. Fee, $7.50.

*111. Advanced Inorganic Chemistry.

Professors Baskerville and Estabrooke.

This course is intended for students intending to specialize in chemistry or chemical engineering.

Prerequisite: Chemistry 4 and 33. Spring term; one recitation and five laboratory hours a week; 3 credits.

100. Research. *Professor Baskerville and other Professors.*

This course is essentially all laboratory practice, involving research work in one or more divisions of chemistry. Instruction in this course follows the preceptorial plan. An acceptably prepared typewritten report must be filed within the Department as one evidence of the work accomplished. This course is required for a departmental certificate. All the students and professors concerned join in one seminar hour each week.

Prerequisite: Chemistry, 20, 33, 44, 50, 70, or their equivalent. In 1921 Chemistry 111 is also a prerequisite. Laboratory practice and work in the chemical library, with conferences, nine hours a week; 3 credits.

A series of lectures by experts not connected with the College is announced each year. These lectures are open to the public as well as to the students of the College.

The *Museum* has been equipped with many specimens for the illustration of the lectures and observation by the students and the public. Many more valuable exhibits have recently been presented to the College by chemical manufacturers in this country and abroad.

The *Wolcott Gibbs Library of Chemistry,* containing about 6,000 volumes and 7,500 pamphlets, is open from 9 to 5 o'clock, five days in the week, and 9 to 1 on Saturdays, under the supervision of a trained librarian. The library is being added to constantly. Mr. James R. Steers, '53, presented the library with 4,000 volumes and endowed it, so that it is kept abreast of the times with current journals and by purchase of the most modern authoritive works on chemistry.

The City College Chemistry Society, organized and directed by the junior and senior students, meets regularly, the programmes of the meetings being posted on the bulletin board of the Department. Members of the staff attend the meetings, and from time to time arrange excursions to works where chemistry as applied to commerce is seen and studied in operation. Papers and digests of the current journals in English, French, German, and Italian are presented and discussed. Graduates are welcomed at these meetings. A similar society exists among the students of the Evening Session.

CLASSICAL LANGUAGES

Greek

Courses 1-4 are prescribed for students in Arts who have chosen Greek as their second language.

1-2. Homer.

The *Iliad* or *Odyssey,* with sight reading in Homer or Herodotus, and prose composition.

Two terms, four hours a week; 7 credits.

3. Plato.

The Apology and *Crito,* with sight reading in Xenophon's *Memorabilia* and Aristophanes' *Clouds.*

Four hours a week; 3½ credits.

4. Greek Drama.

Two plays are read, usually one of Euripides and one of Sophocles. Sight reading.

Four hours a week; 3½ credits.

11. Plato.

One or more dialogues entire, with selections from others: *Phaedo, Phaedrus, Gorgias, Protagoras, Republic.* A literary rather than a linguistic or philosophical course, but with due attention to the content of each dialogue and to the history of Greek philosophy.

Prerequisite: Greek 4, or Greek 3 with grade A or B. Fall term, three hours a week; 3 credits.

12. Greek Epic Poetry.

A rapid reading course in either *Iliad* or *Odyssey,* with studies in Homeric antiquities, the Homeric question, etc.

Prerequisite: as for Greek 11. Fall term, three hours a week; 3 credits.

13. The Greek Historians.

Selections from Herodotus and Thucydides, with collateral reading in Plutarch's *Lives.*

Prerequisite: as for Greek 11. Spring term, three hours a week; 3 credits.

14. Greek Dramatic Poetry.

A number of plays are read, including at least one of Aeschylus and one of Aristophanes. Lectures on the origin and development and the content and form of Greek drama.

Prerequisite: Greek 4. Spring term, three hours a week; 3 credits.

15. Septuagint and New Testament Greek.

A study of portions (a) of the Septuagint version of the Old Testament, and (b) of the New Testament. The emphasis will be upon the literary and linguistic sides.

Fall term, three hours a week; 3 credits.

31. Greek Literature in English Translations.

Lectures, readings from standard translations, historical and critical studies in the development of literary types, the influence of Greek upon modern literature, etc.

Open to students in all courses. Fall term, three hours a week; 3 credits.

35. Greek Governmental Systems.

A study of forms of government among the Greeks, from the Homeric monarchy to the late federal systems, with especial reference to the development and character of the Athenian Democracy.

Open to students in all courses. Spring term, two hours a week; 2 credits. (This course is identical with History 12.)

41-42. Elementary Greek.

Grammar, translation and composition.

Elective; may be taken as a third language in Arts. Two terms, three hours a week; 6 credits.

43-44. Second Year.

Readings in Xenophon, Homer and the Lyric Poets.

Prerequisite: Greek 41-42. Fall and spring terms, three hours a week; 3 credits each term.

Latin

1-2. Vergil.

Four or five books of the *Aeneid,* with study of Latin prosody; prose composition, with suitable grammatical lessons. In the second term, sight reading in the *Metamorphoses* of Ovid.

Prescribed for students in Arts; two terms, four hours a week; 7 credits.

3. Cicero or Livy, and Satires of Horace.

About half of the term is devoted to the reading of either an essay of Cicero—the *De Senectute* or the *De Amicitia*—or selections from Livy's history. In the remainder of the term some of the more familiar of Horace's *Satires* are read as an introduction to his work.

Prescribed for students in Arts. Those who have presented a fourth unit of Latin for admission and those who have satisfactorily completed Courses 51-54 are admitted to Course 3 without taking Courses 1 and 2. Four hours a week; 3½ credits.

*4. Horace: Lyric Poetry and Epistles.

About two-thirds of the term are given to the *Odes;* in the remaining weeks one or two of the *Epodes* and some of the *Epistles* are read.

Prescribed for students in Arts. Four hours a week; 3¼ credits.

11. Latin Comedy: Plautus.

A detailed study of the *Captivi* or *Trinummus,* followed by the rapid reading of the *Rudens* and one other play. Especial attention is paid to the peculiarities of colloquial Latin and the relation of Plautus' plots both to his Greek originals and to the types of modern comedy.

Prerequisite: Latin 4. Fall term, three hours a week; 3 credits.

12. Latin Comedy: Terence.

The *Heauton Timorumenos, Andria, Adelphoe,* and *Phormio.* Particular study is given to Terence's character delineation and to his literary influence upon later writers.

Prerequisite: Latin 4. Spring term, three hours a week; 3 credits.

13. Latin Lyric and Elegiac Poetry.

Selected readings from Catullus, Propertius, Tibullus, and Ovid. The chief subject of the course is Catullus as the poet of impassioned lyric. Students will be expected to seek parallels in other literatures, and Roman life in the period of the authors read will be studied in connection with the text.

Prerequisite: Latin 4. Spring term, three hours a week; 3 credits.

14. Roman Satire.

The course is principally devoted to the Satires of Juvenal, considering not only their literary character but also their relation to the society whose faults Juvenal attacked and his influence upon later authors.

Prerequisite: Latin 4. Fall term, three hours a week; 3 credits.

15. The Latin Historians.

An introductory study of the development of Roman historical literature with illustrations from the *Historicorum Romanorum Fragmenta* and from Sallust and Livy, and the reading of a book of Tacitus' *Annals.* Collateral topics on the monuments of ancient Rome.

Prerequisite: Latin 4. Spring term, three hours a week; 3 credits.

16. Roman Philosophy.

One of Cicero's philosophical works, the *De Natura Deorum, Academica,* or *Tusculan Disputations;* or selected essays of Seneca, with studies of Roman Stoicism and social problems under the imperial tyranny.

Prerequisite: Latin 4. Fall term, three hours a week; 3 credits.

31. Advanced Latin Prose Composition.

A practical course in the writing of continuous passages of Latin

prose, accompanied by a review of Latin forms and syntax; especially for students intending to become teachers of Latin.

Prerequisite: Latin 4. One hour a week; 1 credit.

33. An Introduction to Linguistics.

A general introduction to linguistic science, including phonetics and the causes of change in language, followed by an application of the laws involved to word-formation in Latin.

Prerequisite: Latin 4. One hour a week; 1 credit.

*35. Roman Institutions.

The course will deal historically and topically with Roman life and culture and the organization of the state: the family, religion, politics, the army, economics and finance, business and professional life, education, art, amusements, the influence of Roman civilization upon the mediaeval and modern world, etc.

Lectures, assigned readings, discussions and papers by members of the class.

Open to students of all courses. Fall term, three hours a week; 3 credits. (This course is identical with History 15.)

36. Roman Law.

Lectures on Public and Private Law, with chief stress upon the latter. Readings in the *Institutes* of Gaius and Justinian (Robinson's Selections), and constant reference to Sohm's *Institutes of Roman Law*. Topics assigned to students for reports.

Prerequisite: at least two years of Latin. Spring term, three hours a week; 3 credits. (This course is identical with Government 17.)

41-42. Elementary Latin.

Grammar, translation, and composition.

Elective for students in Science or Social Science. Two terms, three hours a week; 6 credits.

Courses 51-54 are special courses intended for candidates for the Arts degree who have presented less than two years of Latin for entrance. After completing Course 54, students are admitted to Course 3.

51. Elementary Latin.

Five hours a week; 5 credits.

52. Caesar.

Five hours a week; 5 credits.

53. Cicero.

Five hours a week; 5 credits.

54. Vergil.

Five hours a week; 5 credits.

†71-†72. Vergil. *Professor Burke.*

The subject matter of these courses is the same as that of Latin 1-2.

Prescribed for students in Arts; two terms, three hours a week; 5½ credits.

†73. Cicero or Livy, and Selected Satires of Horace. *Professor Burke.*

The subject matter of this course, together with courses 74 and 75 is the same as that of Latin 3-4.

Prescribed for students in Arts; three hours a week; 2½ credits.

†74. Horace: Odes and Epistles. *Professor Burke.*

Prescribed for students in Arts; three hours a week; 3 credits.

†75. Supplementary Course. *Professor Burke.*

Prescribed for students in Arts; three hours a week; 3 credits.

ECONOMICS

Principles, History and Problems

s*1. Elements of Economics. *Professor Robinson and Staff.*

An introductory course in the principles underlying the production, the distribution and the consumption of wealth. One lecture is given each week. The other two hours are devoted to recitation and discussion. Text, recitations and discussions.

Prescribed for all students; three hours a week; 3 credits.

s*2. Evolution of Industry. *Professor Robinson and Staff.*

A study of human progress from the earliest times in getting a living from nature. The evolution of methods of producing goods to gratify the ever-expanding needs of developing civilization are treated. Stress is placed upon industrial England prior to the nineteenth century, but most of the work of the term deals with the industrial history of the United States in its extensive and intensive aspects, in matters of technical development and of social and industrial organization.

Prescribed for Social Science students; elective for others; three hours a week; 3 credits.

11. Problems in Political Economy. *Professor Robinson.*

This course deals with great national economic problems, for the purpose of indicating solutions in accordance with economic principles. Particular attention is paid to the problems of conservation, taxation, tariff, trusts and transportation. Lectures, readings, reports and discussions.

Prerequisite: Economics 1. Fall term, three hours a week; 3 credits.

***12. Resources and Industries of the United States.** *Mr. Albrecht.*

A study of the economic geography of the United States, with a survey of its natural resources, topography, and trade routes; followed by an analysis of the various industries, extractive, manufacturing, and transporting. Typical industries are taken up in order that the student may follow raw materials through their various processes until they are marketed as finished products. Use is made of commerce and private concerns. Lectures, reports, collateral courts, together with special reports and those of various chambers of the information available from federal bureaus, commissions, and readings.

Elective, but prerequisite for degree courses of study in the School of Business and Civic Administration. Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

13. Labor and Employment Problems. *Mr. Albrecht.*

A study of the general principles of collective bargaining, labor legislation, wage systems, labor turnover, job analysis and placement methods. Lectures, discussion, required readings, and reports on observations by students.

Prerequisite: Economics 1. Spring term, three hours a week; 3 credits.

s*20. Money and Banking. *Mr. Byers.*

This course develops the origin and uses of money, the laws of money, the history of coin and paper money, the problems of rising prices, bimetallism and gold exchange, the history and the principles of banking and the problems of banking reforms. Especial attention is given throughout to money and banking conditions in the United States. Lectures, required readings, text.

Elective, but prerequisite for all courses of study in the School of Business and Civic Administration. Co-requisite: Economics 1. Three hours a week; 3 credits.

25. Public and Municipal Finance.

A study of the principles and of the efficient machinery involved in getting public revenues, making public expenditures and dealing with public debts. Emphasis will be put upon the systems of finance in New York City and New York State. Text, lectures, reports, required readings.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits. (This course is identical with Government 25.)

101. Economics. *Professor Robinson.*

Offered in the School of Education, this course is substantially the same in content as Economics 1.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50.

Finance and Accounting

s†220-†221. Business Finance. *Mr. Fox.*

A study of the principles and practices of financing business concerns, with especial attention to corporations. The obtaining of capital by individuals, partners and corporations; short and long term loans, securities of various sorts and considerations which should govern in determining their particular forms. Capitalization. Investments. Inter-business relations. Internal business finance; determination of income and the distribution of profits. Stockholders' rights, insolvency, receivership, reorganization.

Two terms, two hours a week; 4 credits. Fee, $8 each term.

†222-†223. Domestic Credits. *Mr. Orr.*

The course treats the problems of commercial credits from the point of view of the "credit man."

Two terms, two hours a week; 4 credits. Fee, $6 each term.

†225. A Complete Course in Federal and State Income Taxes.

Dr. Joseph J. Klein.

This course is designed to meet the needs of business men and women, lawyers, accountants, revenue agents, and tax officials.

Its scope includes the history of federal and state income tax legislation, and the administration of the federal and state laws, with their particular applications.

A paper on an assigned topic must be submitted by all who seek college credit for the course, though persons who do not wish college credit may attend the lectures.

Two hours, one evening a week; 2 credits. Commerce Building. Fee, $10.

s*130-s*131. Accounting I: Theory, Practice and Problems.

Professors Saxton and Brett and others.

The fundamental principles of accounting developed and applied with a minimum of detail. Opening and closing books and preparation of simple financial statements of a single proprietor. Accounts classified and their effect on final statements studied. Development of various auxiliary books and use of columnar books and controlling accounts. Single entry illustrated, and change to double entry. Change from a sole proprietor to a partnership and departmental business.

Partnership problems in admission of a new partner; division of profits and other adjustments. Use of vouchers and voucher record. Manufacturing accounts and statements. Shipments and consignments. Single and joint ventures. Treatment of bad debts, depreciation, good will, reserve accounts, reserve funds and surplus. Preparation of balance sheets and profit and loss statements in various detailed and condensed forms. Dissolution and liquidation of a partnership as solvent and as insolvent. Sale of business to another firm and change from partnership to a corporation.

Co-requisite: Economics 1. Two terms, four hours a week; 6 credits.

s*230-s*231. Accounting II; Theory, Practice and Problems; Corporation Accounting.

Professors Saxton and Brett and others.

Procedure for incorporation of a business. Opening corporation books, various methods. Discussion of nature and use of accounts peculiar to a corporation. Dividends and their payment. Reserves and surplus. Financing a corporation. Bond issues. Nature of a bond premium and discount. Closing the books of a corporation. Financial statements of trading and manufacturing concerns. Comparative profit and loss statements and balance sheets. Principle and use of the sinking fund. Valuation of bonds and investments. Amortization of bond premium and accumulation of bond discount.

Redemption of bonds—various plans. Agencies and branches. Foreign branches and agencies. Accounting for insurance and adjustment for fire losses. Books and accounts for clubs and professional men. Consolidations and combinations, by merger, by lease, and by holding companies. Consolidated balance sheets and profit and loss statements. Reorganization of a corporation. Dissolution and liquidation, voluntary and through bankruptcy. Statement of affairs and realization and liquidation.

Prerequisite: Economics 1, 130 and 131. Two terms, four hours a week; 6 credits. Fee, $10 each term.

s*232. Principles of Cost Accounting. *Professor Eggleston.*

A fundamental course in principles of cost accounting and methods of their applications to various types of industries.

Two hours a week; 2 credits. Fee, $8.

s†233. Advanced Cost Accounting. *Professor Eggleston.*

An intensive study of cost accounting systems in certain selected industries.

Two hours a week; 2 credits. Fee, $8.

†234. Municipal Department Accounting in the City of New New York. *Mr. Brown.*

A special study of the accounting system of the City of New York, including a detailed analysis of the departmental forms of records in actual use.

Two hours a week, in the Municipal Building; 2 credits. Fee, $8. For city employees, $5.

†235. Municipal Accounting, General.

A general course in methods of handling municipal accounts.

Two hours a week, in the Municipal Building; 2 credits. Fee, $8. For city employees, $5.

†236. Municipal Statistics.

A course dealing with the principles of statistics and their application to the problems which arise in city management.

Two hours a week, in the Municipal Building; 2 credits. Fee, $8. For city employees, $5.

s*237-†238. Auditing.

The auditing of the most important divisions of accounts, together with the procedure of typical forms of business organizations.

Two terms, two hours a week; 4 credits. Fee, $10 each term.

†239. Accounting Systems. *Mr. Finke.*

The principles underlying the establishment of complete accounting and office systems in typical forms of business organizations.

Two hours a week; 2 credits. Fee, $8.

†240. Public Utilities Accounting and Statistics. *Mr. Fox.*

This course deals principally with the accounting classifications of the Interstate Commerce Commission for railroads and the New York Public Service Commissions for other public utilities, the statistical requirements of the commissions and the forms of annual reports.

Two hours a week; 2 credits. Fee, $10.

*†241. Public Utilities Accounting and Regulation.

This course deals with the special accounting problems presented by the valuation of public utilities, regulations of security issues and rate making.

Two hours a week; 2 credits. Fee, $10.

†242. Judicial Accounting. *Mr. Hinds.*

A study of judicial accounting, including testamentary accounting, executors' and administrators' accounts and bankruptcy accounting.

Two hours a week; 2 credits. Fee, $10.

†243-†244. Advanced Accounting Theory and Problems. *Mr. Finke.*

This is a final course designed to give the student power in applying accounting theories to the solution of the most advanced and difficult problems.

Two terms, two hours a week; 4 credits. Fee, $10 each term.

Business Organization and Management

*150. Business Organization.

The economic bases of business. Types of business organization: individual ownership, partnership, joint stock, corporation, combination. Organization plans. Organizing new enterprises: discovery of business opportunity, analysis, promotion, formulation, scientific location, design, standard plant, equipment and organization. Plant organization: factory, railroad, store, etc. Office organization. Sales organization. Fundamentals in effective organization. Studies in organization of various kinds of enterprises. Lectures, assigned readings, reports and extensive use of organization materials. Field studies of operating concerns.

Fall term, three hours a week; 3 credits.

*250. Business Management.

The problems of successful business operation. Importance of the management factor. Fundamentals in successful administration. Management in construction and operation; equipment and technique; records and analysis; organization and administration. Efficiency units; materials, processes, personal services. Plant management:

lay-out, equipment, personnel, power, stores, etc. Office management: accounting and statistical records, cost analyses, mechanical aids, clerical personnel, etc. Sales management: marketing programs, sales campaigns, advertising methods, credit and collections. The scientific management movement. Efficiency reorganization. Studies in the management of special types of enterprises. Lectures, assigned readings, reports and extensive study of management plans of going concerns. Field studies of well-managed enterprises of a number of types.

Spring term, three hours a week; 3 credits. Fee, $7.50.

155. Advertising.

History of advertising; creative power of advertising; mediums employed; means of securing action; good copy; pictorial, outdoor, magazine, newspaper and mail order advertising; planning a campaign; advertising manager; advertising agencies; follow-up systems; office records; analyzing results.

Text-book, lectures, assigned readings, reports and practical work.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

†255. Practical Advertising. *Mr. Holbrook.*

A practical course dealing with the nature of advertising, its application to various types of business and the methods employed in connection with general merchandising and sales direction.

Two hours a week; 2 credits. Fee, $10.

†258. Copy Writing. *Mr. Collins.*

A comprehensive treatment of the preparation of advertising copy. This course consists of carefully directed, practical work. The topics studied include copy writing for magazines, newspapers, billboards and streetcar cards, the writing and preparation of advertising literature—booklets, circulars, etc.—and advertising letters—follow-up and mail-order letters,—what and how to write.

Two hours a week; 2 credits in the School of Business and Civic Administration. Commerce Building. Fee, $10.

156. Marketing Methods and Salesmanship.

Trade factors and trade channels; selling at retail; competition; selling by mail; the jobber; the selling process; human appeals; the salesman's duties; co-operation; selecting salesmen; training salesmen; effective selling methods; psychology of salesmanship.

Text-books, lectures, assigned readings, reports and practical work.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

†256. Selling. *Mr. Rogers.*

A course designed to give the student a grasp of the technique of salesmanship in all departments of commercial activity.

Two hours a week; 2 credits. Fee, $10.

†257. Sales Management.

A course dealing with the problems of sales management in the fields of wholesale and retail commerce.

Fall term, two hours a week; 2 credits. Fee, $10.

***65. Insurance.** *Professor Brett.*

A brief history of the development of the marine, fire, casualty, surety and life insurance companies. The fundamental principles and theory of insurance. Functions of each kind of insurance. Kinds of companies and associations; the organization, requirements and opportunities of entering the employment of some of their departments, such as the actuarial, statistical, auditing and agency departments. Text, lectures and readings.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

Foreign Trade

***70. Foreign Exchange and the Financing of Foreign Trade.** *Professor Snider or Professor Brett.*

A brief analysis of the various items of debt one country incurs with another and the methods of settlement. Causes and meaning of fluctuations in rate of exchange. Methods of buying and selling exchange; cable transfers; bills of exchange; letters of credit; arbitrage transactions, etc. The computations involved. Text, lectures and problems.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

†270. Foreign Exchange Practice. *Mr. Zaldari.*

A brief analysis of the various items of debt one country incurs with another and the methods of settlement. Causes and meaning of fluctuations in rates of exchange. Methods of buying and selling exchange; cable transfers; bills of exchange; letters of credit; arbitrage transactions, etc. The computations involved. Text, lectures and problems.

Spring term, two hours a week; 2 credits. Fee, $6.

***271. Market Geography.**

A study of foreign markets with the emphasis upon trade channels, purchasing power, market demands, national characteristics, credit conditions, transportation, industries, financial and general economic conditions. Lectures, reports, discussions. "Daily Commerce Reports" and other government reports will be used as texts.

Two hours a week; 2 credits. Fee, $6.

†272. Foreign Credits and Financing Foreign Trade. *Mr. Orr.*

Credit conditions in several foreign markets, sources of credit

information, the financing of exports and imports, price quotations in foreign moneys, etc. Text, lectures, reports, discussions.

Two hours a week; 2 credits. Fee, $6.

173. South American Markets. *Professor Snider.*

Factors in foreign business competition for South American trade: investments, freight rates, comparative costs, commercial and financial organizations, and cultural relations. Factors in development of the markets; natural resources, land ownership, social classes, customs and characteristics, purchasing power and standards of living. Lectures, discussions, reports, collateral reading.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

†273. South American Sales Problems. *Professor Snider.*

An advanced course for those familiar with the fundamentals of foreign trade. A salesman's trip will be followed through the principal markets; his difficulties, methods, and actual trade connections will be discussed. The lines carried will be those which are sold sometimes to the retailer and sometimes to the jobber, depending upon market conditions. The emphasis will be placed upon the marketing of boots and shoes and hardware.

Two hours a week; 2 credits. Fee, $6.

†274. Russian Markets.

The American-Russian Chamber of Commerce in co-operation with the College will conduct a series of lectures on Russia. These lectures will be given by men who have a thorough knowledge of their subject. The lectures will cover the commercial, industrial and financial phases of the Russian markets, and also the cultural, psychological, historical and economic foundations.

Two hours a week; 2 credits. Fee, $6.

175. Business Methods in Foreign Trade: Marketing. *Professor Snider.*

This course includes a study of terms of sale, methods employed in selling, the functions of the factors, foreign advertising, governmental regulations, customs, tariffs, export and import control, the sources of information and service, foreign competition, the fundamental principles of international trade. Text, lectures, reports, collateral readings, problems and practice.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

†275. Foreign Sales Practice. *Professor Snider.*

An introductory course in foreign sales organization and the study of foreign markets. Export trade channels, the export middleman, direct sales agencies, advertising, etc.; governmental regulations, customs, tariffs, export and import control, the sources of informa-

tion and service, foreign competition and the fundamental principles of international trade. Text, lectures, reports, discussions.

Two hours a week; 2 credits. Fee, $6.

176. Business Methods in Foreign Trade: Technique.
Professor Snider.

This course includes a study of the documents, paper work, freight rates and routings, chartering, consular and customs requirements, terminals and port facilities; marine and war risk insurance; trade routes of the ocean-borne traffic of the world. Lectures, collateral readings, problems and practice.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

†276. Export Technique. *Mr. Maule and Professor Snider.*

A beginner's course, covering the office practice of export houses; practice work in making out documents and the legal and trade significance of the documents. Lectures, text, practice.

Two hours a week; 2 credits. Fee, $10.

†277. Exporters' Problems. *Mr. Maule.*

Advanced course for persons in the export business.

One hour a week; 1 credit. Fee, $5.

†278. Practical Steamship Operation.

Organization of ocean transportation service; the shipowner, operator, agent, broker, freight broker, marine insurance broker and adjuster; job analysis of the work in the several organizations; practice work and explanations of legal and commercial aspects of the documents used in ocean transportation; typical operations in chartering and operation of a vessel; charter parties, cargo, plans, ships husbandry, insurance; government relations to shipping.

Two hours a week; 2 credits. Fee, $10.

†279. United States and Foreign Customs Administration.

Two hours a week; 2 credits. Fee, $6.

†280. Export and Import Control.

An advanced course for export managers and clerks covering the administrative practice of the War Trade Board and the office practice of the exporter in regard to export licenses. The War Trade Board Journal will be used as the text.

Two hours a week; 2 credits. Fee, $6.

†281. World Commerce. *Dr. Crowell.*

A critical study of American foreign trade problems from the viewpoint of economic strategy, considering the evolution of the world as a trading unit, and the effects of geographical expansion of markets on national development, the colonial partition of the world's back-

ward areas, with its effects on modern commerce, and other characteristic features in the structure and function of the World Market.

Special problems of international finance, such as are involved in the Chinese Consortium and its effect upon trade opportunities, with the mechanism of banking credits, trade tribunals, etc., are particularly considered.

Two hours a week; 2 credits in the School of Business and Civic Administration. Commerce Building. Fee, $10.

†288-†289. **Commercial Russian.** *Mr. Yarmolinsky.*

This course is designed to teach the beginner to understand and speak the language within easy, colloquial limits and also to impart some knowledge of national manners and customs. Practical conversational methods will be used, yet the work will be systematized and guided by regular text-book arrangements and study. Though grammatical rules and paradigms will not be taught at the beginning, they will be developed later, by analysis. Persons who have previously studied this language may profit by the course as a review.

Two terms; three hours a week; 6 credits. Commerce Building. Fee, $7.50 each term.

Business Law

s*190. **Introduction to Business Law—Contracts.**

Professors Burchard and Houston and others.

General legal principles underlying all business activity, and introduction to the growth and development of commercial law. Discussion of what constitutes a binding agreement, its formation, scope, and discharge. Lectures, recitations and case reports.

Three hours a week; 3 credits.

s*191. **Sales Agency, Partnership, Insurance.**

Professors Burchard and Houston and others.

The nature of property, and how it may be owned, conveyed, protected, acquired and transformed. Delegation of contractual powers. Non-corporative associations. Lectures, recitations and case reports.

Prerequisite: Economics 190. Fall term, three hours a week; 3 credits.

s*192. **Corporations, Negotiable Instruments, Equity.**

Professors Burchard and Houston and others.

Nature and scope of a corporation and the legal organization of modern industrial forces. Bills, notes, drafts and other financial mechanisms of exchange. Outline of equitable remedies and jurisdiction. Lectures, recitations and case reports.

Prerequisite: Economics 190. Spring term, three hours a week; 3 credits.

†290. Advanced Problems in Law for Public Accountants.

A special course in business law for advanced students, in which special topics are treated.

Prerequisite: Economics 192. Two hours a week; 2 credits; Commerce Building. Fee, $5.00.

See also, among **Special Courses** (pages 216, 217, 219):

Investments,	*Dr. Fuld.*
The Problems of Population,	*Dr. Das.*
Labor Problems,	*Dr. Das.*
Labor Movements	*Dr. Das.*
Law Lectures for Women	*Miss O'Brien.*
Secretarial Courses.	

EDUCATION

All the work in this department is elective. The aims are:

(1) To contribute to a truly liberal culture by a study of the educational history of the race and the underlying forces that make for a higher civilization.

(2) To provide the future citizen with a knowledge of sound principles of school administration and management.

(3) To provide those who intend to make teaching their profession with adequate training in the principles and methods of teaching.

To become eligible for the College Graduate Professional Certificate of the New York State Educational Department, it is necessary to complete Philosophy 5 and the courses in Education numbered 11, 16, 21, 41.

The same courses are also requisite in order to become eligible for the City Superintendent's examination for license to teach in the elementary schools. Students who complete Education 152 and 153 will be exempt from examinations in music and drawing given by the Board of Education. Students are urged to take these courses as early in their professional training as possible.

To secure the recommendation of the Department for license to teach in the High Schools it is necessary to complete Course 61 in addition to the courses required for eligibility for license to teach in the elementary schools.

Group I. Courses in the History of Education.

s*11. The History of Culture and Education.

Mr. Egbert Turner.

This course describes the system of education by which the principal culture nations of the world have attempted to realize their social ideals and criticises educational theories and practices from the standpoint of those educational principles now accepted as sound. The work is conducted by means of recitations, assigned readings and the writing of themes. Open to all students above the freshman class. Text-book: Duggan, *A Student's Text Book in the History of Education.*

Four hours a week; 4 credits. Offered only to undergraduates in Day and Evening Sessions.

12. National Systems of Education.

This course makes a comparative study of the educational systems of England, France, Germany and the United States to discover the aim, organization, content and method of the fields of elementary, secondary and higher education.

Spring term, three hours a week; 3 credits. (Not given in 1922.)

211. History of Education up to Locke. *Dr. Hannig.*

Although this course deals with the early history of education, its purpose is to enable the student to understand, appreciate, and react intelligently to present-day educational conditions and problems.

Fall term, thirty hours, twenty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

212. History of Education from Locke to Modern Times. *Dr. Hannig.*

This course, a continuation of the preceding, brings the history of education down to recent times. Again, its purpose is to serve as a basis for the interpretation of the educational world of to-day and the solution for the teacher of present-day problems of instruction.

Spring term, thirty hours, twenty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

213. History of Education in the United States. *Dr. Hannig.*

This course has a still greater interpretative value for the present-day educational problems confronting the American teacher, than the preceding ones. Starting with the European background, and sketching our colonial beginnings, the course traces the development of our free public school system, the influence of new educational theories derived from Europe, and the influence of recent social, political, and industrial changes on education in this country.

Fall term, 1922; thirty hours; 2 credits in the School of Education. Registration fee, $2.50; tuition, $5.

214. A Study of Present-Day Tendencies in Education in the Light of Their Origin and Development. *Dr. Hannig.*

This course is intended to serve as a demonstration of the practical value of the study of educational history. Present educational movements are traced to their source and their development, and an effort is made to estimate their probable future trend.

The course is equivalent to Education 224.

Spring term, 1923; thirty hours; 2 credits in the School of Education. Registration fee, $2.50; tuition, $5.

Group II. Educational Psychology.

s*16. Educational Psychology. *Professor Heckman and Mr. Egbert Turner.*

The course is devoted to the study of the following topics:

(a) Child nature, including inheritance of traits, native equipment, characteristics of instincts, variation of capacities and interests, physical growth and its relation to mental development, moral development, exceptional types of children, measurement of mental equipment;

(b) The psychology of learning, including an analysis of the general methods of learning, the nature of the various mental processes involved, the effects of sensory defects, rate and progress of learning, relation of age and individual capacity to learning, relation of interest and motivation to learning, and the value of right methods of study;

(c) The psychology of the school subjects, comprising a brief analysis of the types of learning involved in the various school subjects, as in reading, spelling, writing and arithmetic. The work of the course is illustrated as much as possible by observation of children, by demonstrations and experiments. In addition to the recitations there are assigned reference readings on which written reports are made.

Prerequisite: Philosophy 5. Three hours a week; 3 credits. (This course is identical with Philosophy 71.)

216. Psychology and Education of Exceptional Children.

Professor Heckman.

This course is identical with Education 256.

217. Experimental Educational Psychology.

Professor Heckman.

The course aims first to acquaint the student with the chief characteristics of a valid experimental method in education. It considers practical school problems and endeavors to throw light upon them by an analysis of the psychological principles which are involved. The work of the course consists chiefly of laboratory practice, but includes assigned readings and reports on specific studies.

Spring term 1922; thirty hours, twenty weeks; 2 credits in the School of Education. Registration fee, $2.50; tuition, $5.

218. Psychology of Childhood and Adolescence.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

219. Child Study.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

220. Psychology of Conduct.

This is an introductory course on the psychology of human behaviour. Conduct is regarded as a resultant of inherent and acquired impulses which are critically analyzed. Some of the topics considered are: heredity; instincts; interests; emotions; environment; volitional conduct; thought, its development and relation to action; discipline, its meaning and methods. In addition to lectures, systematic reading is assigned as the basis of planned discussions.

Spring term, 1922; thirty hours, twenty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

Group III. General Educational Theory.

*21. Philosophy and Principles of Education.

Professor Klapper.

This course is devoted, first, to a consideration of the general basis of educational doctrine. The important principles contributed to education by biology, physiology, sociology and psychology are considered in determining their practical application and the modern trend of educational thought. This is followed by work designed to serve as a transition from theoretical psychology to the methods of teaching. The aim is to interpret the lessons of psychology in terms of education and to formulate the scientific principles for a sound pedagogy.

For undergraduate students in the Day or Evening sessions of the College of Liberal Arts and Science. Prerequisite: Education 16. Three hours a week; 3 credits.

121. Philosophy and Principles of Education.

Professor Klapper.

The subject matter of this course is the same as that of Education 21.

Thirty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50.

222. Social Forces in Education. *Dr. Peyser.*

This course gives a knowledge of those social forces which produce vital problems in city education.

The following topics are treated in the course: the educational forces in a modern urban community; the school as a social institution; truancy; juvenile delinquency; adult crime and immorality; poverty and pauperism; the maladjusted home; physical, mental, vocational and social maladjustment; case study; the American community: the native, the Jew, the Italian, the Slav, the Greek, the Russian, etc.; their racial background and the problems for education; Americanization: its problems, processes and ideals.

In addition to occasional lectures, there are class discussions, reports on assigned readings and study of cases.

Thirty hours, twenty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

223. Philosophy of Education.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

224. Modern Educational Theory (Seminar).

Professor Klapper.

This course is equivalent to Education 214.

Spring term, 1922; thirty hours, twenty weeks; 2 credits. Registration fee, $2.50; tuition, $5.

Group IV. School Management and Administration.

231. The Management of a New York City School.

This course studies the problems in the management of a city school, including the consideration of all its human and material resources.

Main Building:

Superintendents John E. Wade and William E. Grady.

Thirty hours, twenty weeks.

Bryant High School Building: *Superintendent Bayne.*

Thirty hours, thirty weeks.
2 credits. Registration fee, $2.50; tuition, $7.50.

131. School Administration in the United States.

This course treats of the organization, administration, and supervision of schools and the school system. It considers the methods and processes by which school authority is expressed in national, in state, and in local administrative divisions. The emphasis is upon the administration of city school systems and the management of their schools. The work is conducted as in Course 11. In addition, students must visit schools for purposes of observation and report.

Prerequisite: Education 11, 16, and 21. Fall term, three hours a week; 3 credits. Open to undergraduates in the Day Session.

232. The Management of a Junior High School.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

233. The Management of a Secondary School.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

Group V. Methods of Teaching in the Elementary Schools.

*41. Methods of Teaching and Class Management.

Professor Klapper.

A survey of the problems of general method, of the conduct of the recitation and the principles of class management. Special emphasis is laid upon methods of teaching each of the elementary school subjects. The work is conducted as in Course 11.

For students in the College of Liberal Arts and Science. Prerequisite: Education 11, 16, and 21. Five hours a week; 5 credits.

141. Methods of Teaching and Class Management.

The subject matter of this course is the same as that of Education 41.

Main Building: *Professor Klapper.*
Thirty hours, thirty weeks.

Public School 27, Manhattan: *Mr. Donohue.*
Thirty hours, twenty weeks.

Public School 44, Bronx: *Superintendent Joseph H. Wade.*
Thirty hours, thirty weeks.

Commerce Building: *Superintendent Jenkins.*
Thirty hours, thirty weeks.

Public School 26, Brooklyn: *Superintendent Veit.*
Thirty hours, thirty weeks.

Boys' High School, Brooklyn: *Superintendent Reynolds.*
Thirty hours, twenty weeks.
2 credits. Registration fee, $2.50.

142. Observation and Practice Teaching in the Elementary Schools.

A practice course in which the student observes elementary school teaching and is given an opportunity to teach under supervision. The course is designed primarily for undergraduate students in the Day Session who hope to teach.

Corequisite: Education 41. Two hours a week; 1 credit in the School of Education.

241. Experimental Study of Problems in Elementary School Teaching. *Professor Klapper.*

This course is designed to acquaint the student with some of the most important problems in elementary school teaching now under investigation and with the method of conducting researches and experiments in teaching problems. The course will be conducted as a seminar.

Thirty hours, twenty weeks; 2 credits in the School of Education. Registration fee, $2.50; tuition, $7.50. (Not given in 1921-1922.)

145. The Teaching of English in the Elementary Schools.

This course is essentially a practical one, intended for teachers who are seeking to improve their methods of instruction. Among the topics to be covered will be Oral and Silent Reading, Phonics, Spelling, Word Study, Story Telling, Dramatization, Memory Selections, Grammar, Correct Usage, Use of Dictionary, Appreciative and Extensive Reading, Oral and Written Composition, Plans of Correction, and Standard Tests in English.

Commerce Building: *Superintendent Stitt.*
Thirty hours, thirty weeks.

Public School 40, Bronx: *Dr. Hein.*
Thirty hours, thirty weeks.

Jamaica Training School: *Dr. Springer.*

Thirty hours, twenty weeks.

Public School 15, Brooklyn: *Mr. Vance.*

Thirty hours, thirty weeks.
2 credits. Registration fee, $2.50.

146. The Teaching of Arithmetic.

The course includes the mastery of certain fundamental phases of Arithmetic, Algebra and Geometry. Thorough mastery of principles is associated with methods. Particular attention is given to certain critical parts of the subjects, including the use of standard scales.

Main Building: *Mr. Hirsdansky.*

Thirty hours, thirty weeks.

Public School 15, Brooklyn: *Dr. Springer.*

Thirty hours, twenty weeks.
2 credits. Registration fee, $2.50.

148. History and Civics: Method and Content.

Superintendent Mandel.

This course discusses problems of methods and organization of subject matter. The more important topics thus considered are: What history and civics should be taught in the elementary schools; why; problems in history and civics teaching; teaching the fundamental principles of government; minimum essentials in history and civics.

Thirty hours, thirty weeks; 2 credits. Public School 59, Manhattan. Registration fee, $2.50.

249. Subject Matter and Methods of Teaching Geography.

Mr. Marks.

The aim of the course is to give a survey of the subject-matter and principles of geography, to consider methods of presentation and to give practical demonstrations of the teaching of the subject.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

150. Method and Content in Nature Study. *Miss Slater.*

This course aims to indicate means of developing in children a sympathetic attitude towards nature. To attain this end, the course considers the content to be taught, the organization of teaching material, method of teaching and making vital the study of nature.

Sixty hours, thirty weeks; 2 credits. Washington Irving High School. Registration fee, $1.

251. General Science: Its Content and Method. *Mr. Marks.*

The subject matter and the method of presenting the subject of general science in the upper grades of the elementary and junior high school are the chief concern of this course. Special attention is given to the interpretation of common experiences in the light of scientific principles.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

152. Methods of Teaching Drawing. *Professor Hunt.*

The course is designed for those who would teach drawing in the elementary schools. It is divided into three parts, dealing respectively with representative drawing, decorative design and working drawings and patterns. The art principles are studied both theoretically and in practice periods, the student's work is criticised, and the modes of presentation, illustration and drill in class, are carefully discussed.

Two hours a week; 1 credit. Open only to students in the Day Session.

153. Methods of Teaching Music. *Professor Baldwin.*

The object is to prepare the student in the theoretical, practical and pedagogical phases of the work and thus qualify him to teach music in the elementary schools.

Two hours a week; 1 credit. Open only to students in the Day Session.

253. Music in the Public Schools.

A. This part of the course is devoted to the study of the material and methods of every grade of the eight school years. The creative and appreciative phases of the music program are also discussed.

B. Eye and Ear Training. The second part of each session aims to give the student power to think tones and to sense rhythms as well as to recognize and write simple melodic phrases in all keys.

Main Building: *Miss Fischer.*

Sixty hours, thirty weeks.

Maxwell Training School: *Miss Tourte.*

Sixty hours, thirty weeks.
2 credits. Registration fee, $2.50; tuition, $10.

154. Methods of Teaching Adult Immigrants. *Dr. Springer.*

This course studies the special problems of methods that confront the teacher of English and Citizenship in special classes for foreigners.

Thirty hours, twenty sessions; 1 credit in the School of Education. Commerce Building. Registration fee, $2.50.

255. Problems in Kindergarten Teaching.
Miss Palmer and others.

(This course is given in three parts, designated A, B and C, respectively.)

Part A. Intelligence Tests. *Professor Heckman.*

The first third of this course concerns itself with the problems of making intelligence tests of childrden of preschool age. It will treat of the fundamentals—aims of intelligence testing, the organization of such a test, the giving of tests, scoring results and interpretation of data.

Parts B and C. Project Method: Theory and Application.
Miss Palmer.

Ten hours are devoted to consideration of (1) the methods which will aid in the development of children between four and six years of age, and (2) the subject matter which should be included in a kindergarten course of study.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, Part A, $2.50; Parts B, C, $2.50.

See also, among **Special Courses** (pages 229, 230):

Visual Instruction *Mr. Crandall.*

Motion Picture Operation. *Mr. Domerhuizen.*

Current History: Materials and Methods. *Dr. Bryan.*

School Gardening and Nature Study. *Dr. Kirkpatrick.*

The Teaching of Muscular-Movement Penmanship. *Mr. Lister.*

Group VI. Education of Exceptional Children.

256. Psychology and Education of Exceptional Children.
Professor Heckman.

The course treats of the psychology of backward, neurotic and mentally deficient children; the relations of physical condition to mentality; the causes of defectiveness; the underlying principles of education and treatment of exceptional children.

In conjunction with the lectures and collateral readings, practical demonstration is given whenever possible.

Fall term, 1921; thirty hours, twenty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

257. Methods of Teaching Ungraded Children. *Miss Walsh.*

This course is concerned with (a) a consideration of principles underlying methods of teaching in special classes; (b) the observation and discussion of demonstration teaching with special reference to

the principles involved; (c) methods of teaching the various subjects of the curriculum in special classes.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

258. Teaching Physically Subnormal Children.

Thirty hours, twenty weeks; 2 credits in the School of Education. Registration fee, $2.50; tuition, $5. (Not given in 1921-1922.)

Group VII. Secondary Education.

61. Secondary Teaching. *Mr. Philip W. L. Cox.*

The course is designed to prepare students to teach in the high schools. It is limited to seniors in the Day Session. Each applicant must present a certificate from the department head of the subject he wishes to teach, testifying to his personality and scholarship. The course treats of the psychology of the adolescent, and the principles and methods applicable to teaching in the secondary schools. The work in the classroom is conducted by lectures, quizzes and discussions on assigned reading in standard texts. In addition, students must visit high schools for the purpose of observation and report.

Corequisite: Education 41. Three hours a week; 3 credits. Open to students in the Day Session.

162. Observation and Practice Teaching in Secondary Schools.

This course is designed to give students opportunities to make systematic observation of secondary teaching and to do practice teaching under supervision in Townsend Harris Hall. Individual conferences with the student follow the practice teaching. Open only to students of the Day Session.

Corequisite: Education 41 and 61. Two hours a week; 1 credit in the School of Education. Open to students in the Day Session.

262. Problems of Administration and Teaching in the Junior High School. *Dr. Van Denburg.*

This course considers the distinctive aims and principles of organization of a junior high school as well as its problems of management, supervision, course of study and teaching. The aim throughout the course is to emphasize the practical problems that confront teacher and supervisor in the junior high school.

Thirty hours, twenty weeks; 2 credits. Main Building. Registration fee, $2.50; tuition, $7.50.

263. Problems in Secondary School Teaching. *Dr. Paul.*

This course provides a systematic treatment of the underlying principles and methods of teaching in high schools.

Thirty hours, thirty weeks; 2 credits. Commerce Building Registration fee, $2.50; tuition, $7.50.

265. Teaching English in Secondary Schools. *Mr. Opdycke.*

The course concerns itself with the fundamental aims in the teaching of English in secondary schools; with the problems of adaptation to different types of students; with methodology in the various branches of English.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $7.50.

266. Teaching Mathematics in the Junior High School. *Dr. Clark.*

The first half of this course concerns itself with content and courses of study.

The second half of the course gives a critical evaluation of the new movements in the mathematics of grades seven, eight, and nine.

Each student is required to undertake a special problem for investigation.

Thirty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $7.50.

267. The Teaching of Mathematics in the High Schools.

Thirty hours, thirty weeks; 2 credits. Registration fee, $2.50; tuition, $7.50. (Not given in 1921-1922. See Course 266.)

268. Teaching Romance Languages. *Mr. Greenberg.*

This course aims to apply the principles of progressive pedagogics to the teaching of the Romance languages, French and Spanish. In addition to lectures by the instructors, and discussion of assigned text demonstrations, lessons are given to high-school pupils by Mr. Greenberg and members of the class. Careful analysis of these lessons constitutes an important feature of this course.

Sixty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $10.

269. The Teaching of History in Secondary Schools.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

270. The Teaching of Civics in Secondary Schools; Municipal Government: Method and Content. *Mr. Reed.*

This course makes a study of actual governmental function. It is planned to give especial aid to teachers of community civics and to those who are preparing themselves to teach the subject.

The content is divided into four parts: the government of New York City; a general study of state and national government; comparative foreign governments; and the methodology best applicable to presenting this subject in the schools.

Munro's *Principles and Methods of Municipal Administration* is used as the text.

Sixty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $10.

†171. General Science: Science and Environment.

Dr. Meister.

This course aims to explain the natural phenomena of everyday life in terms of the concepts, laws and principles of science. It attempts also to give the student a more accurate knowledge of his own science experiences, and a keener appreciation of the work and methods of scientists. The course includes lectures, apparatus demonstrations, reference reading, excursions and laboratory work. This is entirely a course in content material of general science.

Forty-five hours, fifteen weeks; 3 credits in the School of Education. Main Building.

271. The Teaching of Science and General Science.

Dr. Meister.

This course is designed to be of help to teachers in elementary, intermediate and junior high schools, who are teaching or planning to teach a course in general science. Among the topics considered are: choosing materials for a course of study, different courses of study, methods of presentation, the project method in science, general science texts, apparatus and equipment, illustrative materials, popular science books, magazines and pamphlets, scientific toys, such as Meccano, Erector, Chemcraft and Electrical Outfits, excursions, science clubs, laboratory work, standardized tests in science, etc.

Thirty hours, twenty weeks; 2 credits. Main Building. Registration fee, $2.50; tuition, $5; materials, $2.50.

274. Methods of Teaching Commercial Subjects, I.

Mr. Fox.

This course is designed for present and prospective teachers in senior and junior high schools. Among the topics included are: principles governing the organization of courses of study; general methods and types of recitations; special methods in each of the commercial branches.

Thirty hours, twenty weeks; 2 credits. Registration fee, $2.50; tuition, $5. (Not given in the fall of 1921.)

275. Methods of Teaching Commercial Subjects, II.

Mr. Fox.

This course emphasizes special methods in intermediate and advanced bookkeeping, advanced arithmetic, commercial law and commercial geography. Demonstration lessons are given frequently.

Thirty hours, twenty weeks; 2 credits. Registration fee, $2.50; tuition, $5. (Not given in the fall of 1921.)

Group VIII. Educational Tests and Measurements.

76. Mental and Educational Tests. *Professor Heckman.*

The course includes (1) a comprehensive study of the nature and application of the various intelligence scales and tests used in determining the mentality of school children, (2) a brief study of the principal educational tests now employed in measuring the progress of school classes and school systems, (3) a study of the tests used in vocational guidance, and in the selection of employees in business and industries. Practice in using tests is emphasized rather than a mere theoretical study of them.

Instruction and practice in the elements of statistics applicable in computing results of tests and in evaluating them form part of the course.

Opportunity is offered in the Educational Clinic for observation of examinations of children, and of the methods employed in the treatment of results of such clinical examinations.

Prerequisite: Education 16. Three hours a week; 3 credits. (This course is identical with Philosophy 72.) Open only to students in the Day Session.

276. Elements of Statistics as Applied to Education. *Mr. Egbert Turner.*

This course aims to give in non-technical language the training necessary for the understanding and use of quantitative devices essential for dealing with data relating to school problems. The work of the course consists of the presentation and interpretation of statistical data such as averages, medians, measures of variability, principles of graphic method, frequency distributions and coefficients of correlation. The course also includes the consideration of the statistical principles underlying educational and psychological measurements.

Thirty hours, twenty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5; materials, $2.50.

277. Intelligence Tests. *Professor Heckman.*

This course gives the fundamental aims of intelligence testing, the principles governing the organization of an intelligence test, the giving of such tests, scoring results and interpreting the data obtained.

Thirty hours, thirty weeks; 2 credits in the School of Education. Ten sessions in Commerce Building; twenty in Main Building. Registration fee, $2.50; tuition, $7.50.

278. Educational Measurements (Elementary School). *Director Nifenecker.*

This course deals with the aims, instruments and methods of measuring the results of elementary instruction. It considers such topics as standard tests and scales, their administration, the inter-

pretation and description of results, the application of measurements as a basis for educational aims, and as a means for improvement of supervision and of instruction.

Sixty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $12.50.

279. Educational Measurements (Secondary Schools).

2 credits in the School of Education. (Not given in 1921-1922.)

280. Vocational and Industrial Tests.

2 credits in the School of Education. (Not given in 1921-1922.)

Group IX. Physical Education and Recreation.

281. Educational Hygiene. Training the Teacher for School Health Adviser. *Dr. Goldberger.*

This course considers the hygiene of the school child; methods of detecting physical defects such as defects of vision, hearing, nasal breathing and nutrition; the function of school and home in relation to these defects; symptoms of illness in children; the hygiene of the classroom; methods of organizing school and class health leagues.

In addition to lectures and assigned reading, members of the class will have the benefit of clinical demonstrations.

Thirty hours, twenty weeks; 2 credits. Main Building. Registration fee, $2.50; tuition, $7.50.

282. Training for Community Work.

Thirty hours, twenty weeks; 2 credits in the School of Education. Registration fee, $2.50; tuition, $7.50. (Not given in 1921-1922.)

283. Elementary Physical Training.

Dr. Aldinger, Mr. Harper, Miss Dobbins.

The aim of this course is to prepare teachers to teach physical training in the elementary schools of New York City. The subjects studied are the theory and practice of formal gymnastics, tactics, class and group formations, games, dances, mimetics, directed recreation, practice teaching and hygiene. Personal performance will be required of all who are in attendance.

Sixty hours, thirty weeks; 1½ credits. Public School 93, Manhattan. Registration fee, $2.50; tuition, $10.

284. Advanced Physical Training.

Dr. Aldinger, Mr. Harper, Miss Dobbins.

The course consists of advanced theoretical and practical work, including the application of physical training to the special needs of pupils, applied anatomy, the hygiene and physiology of exercise, administration and organization of recreation activities, etc.

Sixty hours, thirty weeks; 1½ credits. Public School 93, Manhattan. Registration fee, $2.50; tuition, $10.

185. Folk Dancing and Athletics for Girls.

Sections A and B, *Miss O'Keefe.*
Sections C and D, *Miss Dobbins.*

This is a course in methods and practice in folk dancing and athletics for girls. The aim of the course is to give a working knowledge of folk dancing, team games and athletic events; and to develop personal performance and ability to teach.

Thirty hours, twenty sessions; 1 credit in the School of Education. Registration fee, $1.

Sec. A, Maxwell Training School, Brooklyn.
Sec. B, Public School 93, Manhattan.
Sec. C, Public School 4, Bronx.
Sec. D, Public School 89, Queens.

285. Teaching of Classical and Folk Dancing.

Miss O'Keefe.

This course includes instruction in elementary technique, exercises for muscle building and training and material suitable for high schools in classical and national dancing.

Thirty hours, twenty weeks; 1 credit in the School of Education. Washington Irving High School. Registration fee, $2.50; tuition, $10.

286. Supervision of Athletics and Game Coaching.

Dr. Aldinger, Messrs. McHugh, Patterson, and Jones.

This course concerns itself with practical and theoretical aspects of the problems that present themselves in supervising athletics and game coaching. The topics discussed include: rules; duties of officials; arranging and conducting athletic meets; class athletics; athletic tests; handicapping; rules of training; overtraining; evils of weight reducing; conditioning; training for sprinting; distance running; hurdling; high and broad jumping; shot putting; discus throwing; relay rowing.

Thirty hours, twenty weeks; 1 credit in the School of Education. Hygiene Building. Registration fee, $2.50; tuition, $7.50.

187. Social Hygiene and Sex Education. *Mr. Hillyer.*

Matter and methods of social hygiene. Social conditions in Europe and America. American "Four-fold Plan." Reconstruction of the individual. Feeble-minded and subnormal. Medical facts and treatment. Eugenic, ethical and social issues involved. Community action.

Sex education, biological foundation. Principles and educable functions. Imbedding of sex education in program of all departments of education. What the child should learn from parents; from teachers. Problems of adolescent boys and girls. Problems of adults. Common errors and misconceptions. Bibliography.

Thirty hours, thirty weeks; 1 credit in the School of Education. Commerce Building. Registration fee, $1.

289. History of Physical Education.

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922.)

Group X. Vocational Education.

191. Methods and Principles of Vocational Education, Men's Trades. *Mr. Eaton.*

The content of this course is selected and arranged for teachers of mechanical arts in technical and trade schools, for teachers in elementary schools and academic high schools who are interested in methods of teaching shop work and related academic subjects, and for evening school teachers.

Sixty hours, thirty weeks; 2 credits. Main Building. Fee for materials, $2.50.

192. Methods and Principles of Teaching Women's Trades. *Miss Marshall.*

The purpose of the course is to give teachers whose preparation has been primarily in the women's trades an understanding of the problems involved in teaching their various subjects in the schools. It deals with work analyses, methods of presenting lessons, keeping class records, finding and developing aptitudes, plans for follow-up, and similar topics.

Sixty hours, thirty weeks; 2 credits. Commerce Building. Fee for materials.

193. Criticism of Trade Teaching. *Mr. Allen.*

Thirty hours; 1 credit in the School of Education. (Not given in 1921-1922.)

194. Administration and Supervision of Vocational Schools. *Mr. Eaton.*

The underlying aim of this course is to prepare teachers in vocational schools for supervisory positions. The problems of organization and administration constitute the content of the course.

Thirty hours, thirty weeks; 2 credits in the School of Education. Main Building. Fee for materials, $2.50.

195. The Technique of Shop Management. *Mr. Allen.*

The Problem of Shop Management. Mechanizing Routine. Care of the Shop. Materials, Care of and Distribution of. Shop Equipment. Shop Layouts. Shop Records. The Hygiene of the Shop. Discipline in the Shop. The Professional Attitude of the Shop Teacher.

Thirty hours, thirty weeks; 2 credits in the School of Education. Brooklyn Vocational School Annex. Fee for materials, $2.50.

196. Vocational Guidance, Placement and Follow-up. *Mr. Cohen.*

The course is designed to unfold the underlying principles of

vocational education and vocational direction. From a study of these principles, there are deduced (a) plans for vocational guidance in the various types of schools; (b) the adjustment of curricula to meet special problems; (c) and the modifications necessary in the methods of teaching, administration and discipline in vocational and prevocational institutions.

Sixty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Fee for materials, $2.50.

295. Administration and Supervision of Continuation Schools. *Dr. Keller.*

This course is planned to meet the needs of candidates for positions as principals and subject supervisors in continuation schools. Emphasis is laid upon the solution of actual problems and their critical analysis by the students.

Forty-five hours, twenty-three sessions; 3 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $7.50.

296. Handwork for Teachers of Ungraded Classes: Method and Content. *Mr. Tanenbaum.*

A practical course in numerous types of handwork suitable for beginners and advanced teachers of abnormal as well as of normal children. The course includes the theory and practice of woodworking, basketry, chaircaning, seatweaving, etc. Numerous models are given.

Sixty hours, thirty weeks; 1 credit in the School of Education. Registration fee, $2.50; tuition, $5.
Sec. A, Public School 186, Manhattan.
Sec. B, Public School 15, Brooklyn.

199. Teacher Training Course for Teachers in Continuation, Part-Time, Schools. *Mr. Laffin, Director.*

INSTRUCTORS—*Messrs. Siegel, Laffin, I. D. Cohen, Keller, Harrigan, Flanagan, and J. R. Stevenson, and Miss Edna Farnsworth.*

This course is designed to prepare teachers who will be required during the next five years in the part-time schools of New York City and State. The course concerns itself with the teaching problems peculiar in part-time schools.

The course throughout is practical and related to the everyday needs of the teacher. For this reason, emphasis is given to such questions as peculiarities of the student body, the governing aim in the education of this student body, the curriculum, distinctive methods of teaching and disciplining.

The content of the course is prescribed by the State Department of Education. Part 1.—Aim, scope, organization of part-time schools. Part 2.—Progress in part-time education in the United

States and foreign countries. Part 3—Methods of teaching, curricula, class management.

Sixty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Fee for materials, $2.50.

297. Theory and Practice of Art Weaving (Beginners' Course). *Miss Kohn.*

This course includes a study of the origin of art weaving; the knots in art-weaving; the Kelim, the Persian, the Turkish rug; oriental color-combination, design, and dyes. The emphasis throughout is placed on numerous exercises, graded and adjusted to meet the capacities and the needs of each student.

Sixty hours, thirty weeks; 1 credit in the School of Education. Public School 62, Manhattan. Registration fee, $2.50; tuition, $10.

298. Theory and Practice in Art Weaving (Advanced Course). *Miss Kohn.*

The work of the first course is continued. The practice work includes advanced weaving, Brussels, Gobelin, French Gobelin, lacemaking, embroidery, Hardanger, Macramé, etc. The conduct of the work is as described in the beginners' course.

Sixty hours, thirty weeks; 1 credit in the School of Education. Public School 62, Manhattan. Registration fee, $2.50; tuition, $10.

299. Short Unit Course in Principles and Practice of Shopwork Teaching. *Mr. Garritt, Supervisor.*

Thirty hours, thirty weeks; 3 courses; 2 credits in the School of Education. Fee, $4 per unit.

Group.	Name of Unit.	Instructor.	Place.
A	1. Organization and Teaching Methods. Elements of Chart Making.	Laurence J. Young.	Murray Hill Vocational School.
	2. Model Yacht Construction.	Thomas Darling.	Murray Hill Vocational School.
	3. Design Applied to Shop Problems.	Laurence J. Young.	Murray Hill Vocational School.
	4. Design and Construction of Toys.	Thomas Anskis.	P. S. 27, Manhattan.
	5. Soft Metal Casting and Pattern Making.	William Rushforth.	Murray Hill Vocational School.
B	6. Educational Chart Making—Advanced Course (see Group A No. 1).	Laurence J. Young.	Murray Hill Vocational School.
	7. Cement Work.	LeRoy Barker.	P. S. 1, Brooklyn.
	8. Wood-carving.	Thomas Hogan.	P. S. 27, Manhattan.
	9. Art Metal Work.	Mrs. Annie Coe.	Stuyvesant High School.
C	10. Scenic Models and Stage Craft.	Walter Maher.	P. S. 79, Manhattan.
	11. Mechanical Models—Steam Engine and Telegraph.	Samuel Zucker.	P. S. 79, Manhattan.
	12. Tin Toy Making.	Arthur Gardner.	Murray Hill Vocational School.
	13. Model Aeroplane Construction.	Chas. Muller.	Murray Hill Vocational School.

100. Educational Seminar. *The Department Staff.*

The study of important educational problems from educational records and through examination of actual conditions in the New York City school system. It is proposed to take problems which are now confronting the Board of Superintendents and the Department of Reference and Research, and to use these as laboratory material for specially selected students who have shown their worth in the other courses in Education.

Fall term, three hours a week; 3 credits.

ENGINEERING

Civil Engineering

*CE 101. Theory of Surveying.

The fundamental principles of surveying. The construction, adjustment and use of surveying instruments. Methods of surveying for distance, area, profile and topography. Base line measurement and triangulation work; trigonometric and barometric leveling; setting grade, slope and construction stakes and computing earthwork; determining the true meridian, latitude and longitude by astronomical observations. Two hours a week are devoted to field practice, in which the manipulation of the various instruments is taught and traverses are run with compass, transit, tape and level. Problems in the reduction of actual field notes are solved by the students.

Prerequisite: Plane Trigonometry. Spring term, three recitations and two field work hours a week; 3 credits.

*CE 102. Practical Surveying (First Summer Camp).

This course consists of thirty consecutive days field and office computation work during the summer months.

The transit and level are adjusted by each student and, in squads of three; six distinct traverses are run.

After each traverse is completed, computations and maps are completed before the next survey is started.

Prerequisite: C.E. 101. Summer: 30 Clear Days. 3 credits.

s*CE 202. Theory of Surveying (Advanced).

In this course the student studies the more refined and exact processes of surveying. Topographic methods with the transit and stadia and plane table are studied. Methods for determining latitude, longitude and meridian and of base line measurement are discussed. Shaft plumbing and tunnel surveying. Precise leveling.

Prerequisite: C.E. 101 and 102. Fall term, three recitation hours a week; 3 credits. Fee, $7.50.

s*CE 203. Practical Surveying (Second Summer Camp).

This course consists of thirty clear days field work at Van Cortlandt Park. Field and office work are carried on under working conditions.

Two large traverses are run:

(1) Railroad Survey.

(2) Topographic—Hydrographic Survey.

These surveys will cover the entire southern part of Van Cortlandt Park and Lake. Topographic detail and contours will be located, also sub-surface contours of the lake.

Prerequisite: C.E. 102 and 202. Thirty clear days (240 hours); 3 credits. Fee, $10.

*CE 110. Materials of Construction.

In this course will be considered the materials of construction, their use and suitability, together with tests and inspection. The materials studied will be those falling under the four broad classifications of (1) masonry materials, including limes, cements and concrete; (2) ferrous metals, pig, cast and wrought iron, and steel; (3) timber; (4) street pavement and highway materials.

Two hours, recitations and lectures, and three hours a week in the testing laboratories; 3 credits.

*CE 111. Mechanics of Materials.

This is the fundamental course in Mechanics of Materials and Applied Statics. The topics treated include the following: Hooke's law, common theory of flexure, analysis and design of simple beams, columns, struts and girders; bending moments, shears, and deflections in beams of various types; reinforced concrete design.

Prerequisite: Physics 12. Co-requisite or prerequisite: CE 110. Five hours a week; 3 credits.

*CE 120. Hydraulics.

The principles of hydrostatics and hydrokinetics with their applications to the measurements of head, pressure and flow; gauges and manometers; equilibrium of floating bodies, stability of dams against water pressure; Venturi meter, Pitot tube, current meters, floats, weirs; loss of head and flow through pipes, orifices, nozzles; flow in channels; backwater; elements of flow in compressible fluids.

Prerequisite: Physics 12. Spring term, three hours a week; 3 credits.

*CE 221. Hydraulics Laboratory.

An experimental investigation and demonstration of the basic hydraulic phenomena. The use and calibration of weirs, meters, Pitot and Venturi tubes, nozzles and orifices. The testing of miscellaneous hydraulic apparatus.

Co-requisite: C.E. 120. Spring term, three hours a week; 2 credits. Fee, $7.50.

*CE 222. Materials Laboratory.

Tests on concrete beams, reinforced concrete slabs, large wooden and metal beams and columns. Shearing tests on rivets and structural members.

Prerequisite: CE 110. Fall term, three hours a week; 2 credits. Fee, $7.50.

*CE 223. Graphics.

Analysis of simple roof trusses; the force diagram; the funicular polygon. Roof with one end free; with fixed ends. Snow and wind loads. Graphical solution of a traveling crane problem. Graphical solution of stresses in bridge trusses. Lecture and recitation work supplemented with drafting room practice.

Prerequisite: CE 110; co-requisite: CE 111. Fall term, six hours a week; 3 credits. Fee, $15.

*CE 224. Highways and Pavements.

Preliminary consideration. Types of roads and pavements. Materials used. Functions of a pavement. Traffic census. Preliminary surveying and planning. Preparation of the subgrade. Drainage. Surfacing methods. Dirt roads, bituminous macadam and bituminous concrete. Water-bound macadam. Concrete roads. Sheet asphalt and asphalt block. Brick, granite block and wood block pavements. Subsurface work. Curbs and gutters. Maintenance methods. Street cleaning.

Prerequisite: CE 110. Spring term, three hours a week; 3 credits. Fee, $7.50.

*CE 225. Masonry.

Theory of earth pressure; bearing power of soils and rock. Study of materials, preparation, and use. Design and construction of masonry structures.

Prerequisite: CE 110 and 111. Fall term, four hours a week; 3 credits. Fee, $10.

*CE 226. Railroad Curves.

Simple, compound, reverse, transition, and spiral curves. Frogs, switches, and turnouts.

Prerequisite: CE 101 and 102. Fall term, four hours a week; 3 credits. Fee, $10.

*CE 232. Roofs, Bridges, and Framed Structures (First Term)

Types of roof and bridge trusses. Stresses in roof trusses. Bridge trusses under dead and live loads. Plate girders. Preparation of stress diagrams.

Co-requisite: C. E. 223. Fall term, five hours a week; 3 credits. Fee, $12.50.

*CE 233. Sewers and Sewage Disposal.

Design and construction of sewers and sewer systems. Separate and combined systems. Flow through pipes. Methods of disposal of waste. Maintenance.

Prerequisite: CE 101, 110, and 120. Spring term, four hours a week; 3 credits. Fee, $10.

*CE 235. Foundations.

Study of the supporting capacity of soils. Types of footings. Piles, capping, crib work. Timber, brick, stone, concrete foundations, caissons and under water foundation work for buildings, walls, piers, docks.

Prerequisite: CE 110 and 111. Fall term, four hours a week; 3 credits. Fee, $10.

*CE 236. Railroad Engineering.

Necessary surveys, computations, preparation of roadbed. The mass curve. Ties, rails, plates, fittings, accessories. Terminals, sidings, structures. Maintenance and repairs.

Prerequisite: CE 110, 111, and 226. Spring term, four hours a week; 3 credits. Fee, $10.

*CE 242. Roofs, Bridges, and Framed Structures (Second Term).

Design of members and connections of roof trusses, plate girder, truss bridges and buildings. Problems in design of typical roof truss, plate girder, bridge trusses of various types, and steel framing in building.

Prerequisite: CE 232. Spring term, five hours a week; 3 credits. Fee, $12.50.

*CE 243. Water Supply and Irrigation.

Rainfall, rate of saturation, and run off. Water census. Impounding of waters. Various types of dams. Aqueducts. Flow through pipes. Distributing systems. Filtration and purification of water. Meters, weirs, and consumption. Water supply as it applies to irrigation.

Prerequisite: CE 120 and 221. Fall term, four hours a week; 3 credits. Fee, $10.

*CE 244. Tunneling and Excavation.

The movement of large quantities of earth in excavation. Preliminary exploration work. Test pits. The diamond drill; the calyx drill. Methods of wash boring. Shaft sinking methods. Turning the heading. Drills, explosives. Method of driving, excavation of heading and bench. Drainage, lining. Methods of surveying and measurement.

Prerequisite: CE 203. Spring term, four hours a week; 3 credits. Fee, $10.

*CE 245. Reinforced Concrete.

Elementary principles of reinforced concrete. Methods of mixing and laying. Types of reinforcing rods and plates. Analytical design. Placing of rods. Computation of stresses in a reinforced concrete beam. Reinforced concrete columns. Flat slab construction. Design and detailing of a reinforced concrete building.

Prerequisite: CE 111. Spring term, four hours a week; 3 credits. Fee, $10.

*EE 120. Elementary Electrical Engineering.

Elementary theory and general construction of simple electrical machinery. Theory and experiments on electro-magnets, transformers, d. c. generators and motors, a. c. generators. Inspection and report on power plant.

Prerequisite: Physics 4 and 8. Two lectures or recitations, and four laboratory hours a week; 4 credits.

*EE 122. Electrical Measurements.

Laboratory and field use, and calibration of ammeters, voltmeters, wattmeters, watt-hour meters, instrument transformers. Measurement of fundamental electrical constants of circuits. Commercial use of certain instruments.

Prerequisite: Physics 11. Spring term, three laboratory hours a week; 2 credits.

*EE 124. Alternating Currents.

More advanced theory of a. c. circuits and machinery. Basic definitions and formulas, and symbolic and graphic forms of representation for alternating currents. Solution of circuits. Theoretical design and calculation of transformers, induction motors, alternators, synchronous motors, and rotary converters.

Prerequisite: Physics 11. Spring term, three hours a week; 3 credits.

*EE 230. Direct Current Machinery.

Continuation of EE 120. Study and comparison of d. c. motors and generators. Laboratory tests for regulation, efficiency, and temperature rise. Installation, control and protective equipment, and operation of machines.

Prerequisite: Physics 11 and EE 120 and 122. Fall term, two lectures or recitations and four laboratory hours a week; 4 credits. Fee, $15.

*EE 232. Industrial Motor Applications.

Use of motors in manufacture, building, marine propulsion, and mining. Application of constant and variable speed motors to factory machine tools. Crane motors and control systems.

Prerequisite: EE 120. Fall term, two lectures or recitations a week; 2 credits. Fee, $5.

*EE 233. Illuminating Engineering.

Theory of light distribution and measurements, and factors governing the choice of illuminants. Illuminating characteristics of incandescent lamps and arcs. Modification of lighting by reflectors, wall tints, surface quality. Maintenance of lighting systems and useful life of lamps.

Prerequisite: EE 120. Fall term, two lectures or recitations a week: 2 credits. Fee, $5.

EE 234, 244. Electrical Design.

Design of motors, generators, switchboards, and other forms of electrical apparatus. Choice and installation of measuring instruments and control equipment. Factory methods of design and construction, and drafting room, model shop, and production routine.

Co-requisite: EE 230 and 240. Fall and spring terms, four hours a week; 4 credits. Fee, $10 each term.

*EE 235. Telegraph and Telephone Engineering.

For students of "Communication Engineering." Principal devices used in telegraphy, telephony, automatic telephony, multiplex high speed telegraphy, and cable telegraphy. Magneto, common battery, and automatic telephone centrals. Lectures and use of equipment in laboratory.

Prerequisite: Physics 4. Fall term, two hours a week; 2 credits. Fee, $5.

EE 136, 146. Radio Engineering.

For students of "Communication Engineering." First term: high frequency alternating current phenomena, the production, measurement, and control of such currents and of electro-magnetic waves. General theory and construction of a simple radio station. Second term: modern radio system, including telephony, arc systems, vacuum tube systems, and alternator systems. Laboratory work on test and installation of various forms of radio stations.

Prerequisite: Physics 11. Fall and spring terms, six hours a week; laboratory, lecture and recitation; 8 credits. (Not given in 1921-22.)

EE 237. Power Plants.

Design, construction, and operation of power plants. Isolated plants, central station plants, automatic power plants, and hydro-electric stations. Economic questions involved in power plants, including methods of selling power and improving the load factor of the plant.

Co-requisite: EE 230. Fall term, two hours a week; 2 credits. Fee, $5.

*EE 240. Alternating Current Machinery.

Continuation of EE 120 and 230. Study and comparison of various a. c. motors and generators. Induction motors, synchronous motors, repulsion motors, and rotary converters. Polyphase generators and motors and phase-transformations. Regulation, efficiency, and heating of a. c. machines. Installation, operation, and protective and control equipment for a. c. machines.

Prerequisite: EE 124 and 230. Spring term, two lectures or recitations and four laboratory hours a week; 4 credits. Fee, $15.

EE 242. Distribution and Transmission.

Distribution of electricity for light and power, and over short and long distances. Two and three wire d. c. systems; single, two,

and three phase a. c. systems. Building and city wiring layouts, and long distance high voltage distribution systems. Fire protection.

Co-requisite: EE 240. Spring term, four hours a week; 4 credits. Fee, $10.

EE 243. Electric Railroads.

Principal systems of electric traction for railroads, mines, and factories. Construction, equipment, and operation of urban, suburban and long distance railroads. Control systems and dynamic braking. Study of recent large scale railroad electrification projects.

Co-requisite: EE 240 and 242. Spring term, two hours a week; 2 credits. Fee, $5.

Mechanical Engineering

sME 210. Forge and Foundry Laboratory.

The greater part of the term is devoted to forge work, which comprises exercises in pointing, turning, flattening and bending, in the making of various kinds of welds, in steel working, hardening, annealing and tempering.

Enough work in molding and casting is done to familiarize the students with these operations.

Frequent talks are given on the manufacture of the different varieties of iron, their properties, defects and suitability for various purposes.

Sixty-four hours in the Summer Session; 1 credit. Fee, $10.

*ME 211. Mechanical Instrument Laboratory.

The study, calibration and use of the instruments of the engineer. Text-books: Smart, *Engineering Laboratory Practice;* Carpenter and Diedrichs, *Experimental Engineering.*

Prerequisite: Physics 7. Fall term, four hours a week; 2 credits. Fee, $10.

sME 220. Pattern Making.

This course begins with instruction in the elements of joinery and wood turning. Thorough training is given in the use, adjustment, sharpening and care of wood-working tools, both hand and machine, patterns and core boxes of pipe fittings, pulleys, gears, hangers, machine parts, etc. Careful consideration is given to the effect of the moulding of the pattern and machining of the casting on the design of the pattern.

One hundred and twenty eight hours in the Summer Session; 3 credits. Fee, 20.

ME 221, 242. Heat Power Engineering.

The study of thermodynamics. The combustion of fuels, furnaces, boilers, gas producers, steam, oil and gas engines, auxiliary and

miscellaneous apparatus. Text: Hirshfeld and Barnard, *Heat Power Engineering.*

Prerequisite: Physics 12 and 13. Spring and fall terms, four hours a week; 6 credits. Fee, $10 each term.

*ME 122. Power.

A qualitative analysis of the three systems of power generation, water, steam and gas, with a study of their applicability to manufacture, transportation and mining.

Prescribed for students in Chemical, Civil, and Electrical Engineering. Prerequisite: Physics 7. Fall term, three hours a week; 3 credits.

ME 124. Kinematics.

The graphical analysis of mechanical movements. Theory and application of mechanisms, instant centers, linkages, the phorograph, velocity and acceleration diagrams, cams, gears, etc. Text: Angus, *Theory of Machines.*

Prerequisite: Physics 12. Spring term, one recitation and three drawing hours a week; 2 credits.

*ME 230. Machine Tool Laboratory.

This laboratory is equipped with seventeen lathes, two planers, two shapers, two milling machines, a universal grinder, a centering machine, a sensitive drill, a radial drill, a power hack saw, a hardening and annealing oven and a double emery grinder. Over one-half the machines are provided with individual motor drive. The exercises on the lathe are graded and cover all the typical lathe operations. After the student has completed these lathe exercises, he takes up the work on the other machines and advanced lathe work. The student is required to make a careful study of each machine before being allowed to operate it.

Prerequisite: ME 220. Fall term, six hours a week; 2 credits. Fee, $15.

ME 231, 243. Heat Power Engineering Laboratory.

The study and testing of boilers, furnaces, steam, gas and oil engines, steam turbines, steam pumps; including their auxiliary apparatus. Reference books: Smart, *Engineering Laboratory Practice;* Carpenter and Diedrichs, *Experimental Engineering.*

Co-requisite: ME 221 and 242. Spring and fall terms, four hours a week; 4 credits. Fee, $10 each term.

*ME 232. Water Power.

The theory, investigation and development of water powers and of hydraulic turbines. The design of plant and selection of machinery. Text: Mead's *Water Power Engineering.*

Prerequisite: CE 221. Fall term, three hours a week; 3 credits. Fee, $7.50.

***ME 233. Water Power Laboratory.**

The testing of the machines studied in Course 232.

Co-requisite: ME 232. Fall term, three hours a week; 2 credits. Fee, $7.50.

ME 234, 244. Machine Design.

The application of previously learned principles to the actual design of machinery.

Prerequisite: Art 201, ME 24, and CE 110 and 111. Fall and spring terms, six hours a week; 6 credits. Fee, $15 each term.

***ME 235. Heating and Ventilation.**

A study of the heating and ventilation of dwellings, public buildings and factories. Text: Hoffman, *Heating and Ventilating Engineer's Pocket Book.*

Prerequisite: ME 221 and 242. Spring term, two hours a week; 2 credits. Fee, $5.

ME 240. Shop Processes.

A study of the methods of production. The theory of hand and machine tools. Various methods of fashioning materials. Visits to manufacturing plants.

Prerequisite: ME 230. Spring term, three hours a week; 2 credits. Fee, $7.50.

ME 241. Power Plants.

A study of the considerations governing the design of plants for the production of power, choice of site, selection and arrangement of equipment, statistics on performance and costs.

Prerequisite: ME 231 and 233. Spring term, four hours a week; 3 credits. Fee, $10.

See also, among **Special Courses** (pages 227-229):

Building Construction Courses. *Professor McLoughlin.*

Municipal Construction Courses.

Advanced Machine Tool Laboratory.

Automobile Mechanics. *Dean Skene.*

ENGLISH LANGUAGE AND LITERATURE

s*1. Rhetoric.[1] *Professor Stair and others.*

Paragraph and essay writing. A laboratory course, consisting of written work done in class without home preparation, and with discussion and explanation of the principles involved. Frequent personal conferences with the instructor will require extra time from the student. Credit for the course will not be given until a student can write grammatically and spell correctly. Text-book: Woolley's *Handbook of Composition.*

Prescribed; two hours a week; 1 credit.

s*2. Rhetoric.[1] *Professor Stair and others.*

A continuation of Course 1, with more stress upon the larger forms of composition, and practical methods of self-expression. This is the last prescribed composition course in the College, and credit for it will not be given until a student has learned to express himself in writing with both ease and accuracy.

Prescribed; two hours a week; 1 credit.
Prerequisite: English 1.

s*3. The History of English Literature.
Professor Grendon and others.

Collateral reading required. Text-books: Moody and Lovett's *First View of English Literature,* Pancoast's *English Prose and Verse.*

Prescribed; four hours a week; 4 credits.

11. Diction and Grammar. *Professor E. F. Palmer.*

The aim is partly to enlarge the student's vocabulary and give him a sense of the finer distinctions between words, and partly to guide him to the rhetorical effect of the order and arrangement of words in sentences. Some attention is also given to the history of the language, and to literary thought. Frequent written exercises are required. Text-books: West's *English Grammar,* Roe's *English Prose.*

Prerequisite: English 1 and 2. Cannot be taken at the same time as English 12 or 13. Two hours a week; 2 credits.

12. Advanced Composition. *Professor Whiteside.*

This course serves as a continuation of Courses 2 and 11. It is intended for students who wish to specialize in journalism or other

[1] Special classes are formed for those who, because of foreign birth and imperfect knowledge of the English language, have been admitted to the College with conditions in that subject.

modern forms of composition. The exercises include the writing and criticizing of editorials, reviews, and essays.

Prerequisite: English 1 and 2. Cannot be taken at the same time as English 11 or 13. Two hours a week; 2 credits.

13. Syntax and Style. *Professor Mott.*

A study of present English usage. Text-book: Barnett and Dale's *Anthology of Modern English Prose.*

Prerequisite: English 1 and 2. Cannot be taken at the same time as English 11 or 12. Two hours a week; 2 credits.

21. Shakespeare's Histories. *Professor Mott.*

All the histories will be read, together with Marlowe's *Edward II.*

Prerequisite: English 1 and 3. Fall term in alternate years (to be given 1922); three hours a week; 3 credits.

22. Shakespeare's Comedies.

All the comedies will be read, together with Jonson's *Every Man in His Humor.*

Prerequisite: English 1 and 3. Fall term in alternate years (to be given 1921); three hours a week; 3 credits.

23. Shakespeare's Tragedies.

All the tragedies will be read, together with Marlowe's *Faustus* and Kyd's *Spanish Tragedy.*

Prerequisite: English 1 and 3. Spring term, three hours a week; 3 credits.

24. English Poetry. *Professor Mott.*

The Renaissance and the classic influences; a study of epic romance, epic, classic drama, satire and epistle. Selections from the works of Spenser and Pope are read and *Paradise Lost* and *Samson Agonistes* are carefully studied.

Prerequisite: English 1 and 3. Fall term, two hours a week; 2 credits.

25. English Poetry of the XIXth Century. *Professor Mott.*

Text-book: Ward's *English Poets,* Vol. IV.

Prerequisite: English 1 and 3. Spring term, two hours a week; 2 credits.

***26. English Prose to the End of the XVIIIth Century.** *Professor Krowl.*

The work of this course is divided into three parts: (1) lectures, recitations and reports, intended to familiarize the student with the history of prose and its relation to contemporary social and political movements; (2) private reading of a considerable amount of prose literature; (3) occasional themes, designed to give the student practice in composition.

Prerequisite: English 1 and 3. Two hours a week; 2 credits.

***27. English and American Prose of the XIXth Century.** *Professor Krowl.*

The work is divided as in 26.

Prerequisite: English 1 and 3. Two hours a week; 2 credits.

28. The Development of Fiction. *Professor Horne.*

The progress of fiction and man's development as shown in fiction are traced from antiquity to the evolution of modern society and the modern novel. Text-books: Horne's *Technique of the Novel,* and a selected series of works, covering the masterpieces of early fiction.

Prerequisite: English 1 and 3. Fall term, two hours a week; 2 credits.

29. The Novel of the XIXth Century. *Professor Horne.*

Text-books: Horne's *Technique of the Novel,* and a selected series of great novels both English and foreign.

Prerequisite: English 1 and 3. Spring term, two hours a week; 2 credits. Applicants for this course who have not taken English 28, must consult Professor Horne and do some preparatory work.

****30. American Literature.** *Professor Otis.*

The relation of American literature to the national life and thought. An attempt will be made to discover the distinctly American elements. Its relation to British literature will be noted.

Colonial literature; the literature of the Revolution; the New England group; the literature of the Civil War; the literature of the South; Western writers; present tendencies in American literature.

Outside reading, conferences and written reports will be required.

Prerequisite: English 1 and 3. Two hours a week; 2 credits.

***31. Social and Ethical Forces in English Literature in the XVIIIth and XIXth Centuries.** *Professor Compton.*

The relation of English Literature to national life and thought. A course dealing with the content rather than the form of books, pointing out the ideas and ideals to which the English-speaking peoples have given voice during the past two centuries. Considerable outside reading will be required.

Prerequisite: English 1 and 3. Fall term, two hours a week; 2 credits.

***32. Contemporary Literature of the English - Speaking Peoples.** *Professor Coleman.*

This course is to some extent a continuation of 31, but may also be taken by students who have earned a good standing in Course 3. The course deals with the various literary forms of the last quarter century, with the authors themselves and with their thoughts and teachings. It is mainly a lecture course given by various members

of the English Department. Considerable outside reading will be required.

Prerequisite: English 1 and 3. Spring term, two hours a week; 2 credits.

41-42. Comparative Literature and Art.

LITERATURE. *Professor Crowne and others.*

An introductory view of some of the great European writers, ancient, medieval, and modern; their backgrounds and ideals; their place in literary evolution; the relation to the culture of to-day. Lectures, readings, and reports. Some of the lectures will be given by members of the various language departments.

ART. *Professor Hunt.*

The philosophy and social significance of the fine arts, architecture, sculpture, and painting; art appreciation; historical outline; lantern slides and other material; visits to the Metropolitan Museum.

Prerequisite: English 3 and one year of college work in a foreign language.

Either English 41-42 or a third language is prescribed for students in Arts; elective for others. 41 and 42 constitute a year's course beginning in the fall, but in special cases students may receive credit for either term without the other.

Two lectures and one recitation a week; 3 credits each term.

†72. Shakespeare's Comedies. *Professor Krowl.*

This course is identical in subject matter with English 22, but of less extent.

Two hours a week; 2 credits.

†73. Shakespeare's Tragedies. *Professor Krowl.*

This course is identical in subject matter with English 23, but of less extent.

Two hours a week; 2 credits.

101. English Drama. *Professor Krowl.*

Thirty hours; 2 credits. (Not given in 1921-1922.)

102. The Short Story: Its Development and Appreciation. *Prof. Coleman.*

This course supplements that on the novel. After two or three introductory lectures on the earlier and less artistic forms, the main part of the work is with the modern examples from Poe and Irving down to the writers of the present day.

Most of the study is given to English anad American writers, with an occasional side glance, however, at the best French and Russian practitioners of the art.

In addition to attending the lectures, students are expected to do assigned reading and submit reports.

Thirty hours, thirty weeks; 2 credits. Registration fee, $2.50. (Not given in 1921-1922.)

125. English Poetry of the Nineteenth Century.

The subject matter of this course is similar to that of English 25.

Main Building: *Professor Mott.*

Thirty hours. Not given in 1921-1922.

Jamaica Training School: *Dr. Britton.*

Thirty hours, thirty weeks.
2 credits. Registration fee, $2.50.

126. Appreciation of Poetry. *Professor Coleman.*

The aim of this course is primarily appreciative. Beginning with Shakespeare it passes to the chief poets of the eighteenth and nineteenth centuries studied in the elementary school, as well as others still more modern, with a view to understanding the nature of poetic utterance—its subject-matter and its form. Occasional suggestions are made as to methods of interpreting poetry to school pupils.

Thirty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50.

129. The Novel. *Professor Horne.*

This course aims to study the value of the novel as literature, to examine its laws of construction, and to trace the historical development of fiction.

Thirty hours, thirty weeks: 2 credits. Main Building. Registration fee, $2.50.

132. Contemporary Literature. *Professor Krowl.*

This course aims to acquaint the student with the literary work that is being done in prose and poetry. Little attention is given to biographical details. The lectures present the art and the aim of each writer, and trace his relationship to literary, social and political movements. Regular assignments are made at each session and students are required to submit reports of this work.

Thirty hours, thirty weeks; 2 credits. Registration fee, $2.50.
Sec. A. Public School 15, Brooklyn.
Sec. B. Main Building.

s†201-s†202. Business English Composition.

Exercises developing fundamental principles of grammar and rhetoric with applications to business correspondence, reports, including letters of application, order, receipt, acknowledgment, claim, adjustment, introduction, recommendation, sales, advertising, form circular, official, follow-up, etc. Letters will be written, read, criticised and re-written. Paragraph and essay writing in class and at home. Text-books and class notes are used as the bases of instruction.

Two terms, two hours a week; 4 credits. Fee, $5 each term.

203. Advanced Course in English Literature.

Professor Krowl.

This course traces the development of English literature from

Chaucer to the end of the nineteenth century. Little attention is given to literary forms, the influence of contemporary thought and ideals. Each member of the class is required to choose one period of literary history or one literary form, and make an intensive study of it. Essays and reports on this work are assigned regularly.

Sixty hours, thirty weeks; 4 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $10.

212. Advanced Composition and Rhetoric. *Professor Stair.*

Spring term, 1922. Thirty hours, twenty weeks; 2 credits in the School of Education. Registration fee, $2.50; tuition, $7.50.

†217—†218. Advanced Writing. *Professor Compton.*

Fall Term—Short story writing. Spring Term—Journalistic forms, the editorial, the special article, etc. This course attempts to give the student an introduction to modern forms of writing. Students may take either term without taking the other.

Prerequisite, for candidates for credit, English 1 and 2 or their equivalents.

Two terms, two hours a week; 4 credits. Fee, $10.

222. Advanced Course in Shakespeare. *Professor Mott.*

Six or eight plays will be studied, primarily as works of dramatic art, though some attention will be given to linguistic difficulties. Every play will be analyzed for plot, character and poetry, selected passages will be intensively studied, and the class will be asked to discuss and write essays on the points involved.

Thirty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

226. Development of English Prose Style. *Mr. Foley.*

The course concerns itself with the evolution of English prose style as seen in the writings of the major essayists. Selected texts are critically analyzed to study the elements of style: words, sentences, the paragraph and the essay form. Literary criticism, its nature, function and standards is emphasized. As planned, the course aims to develop a keener language sense and an intimacy with the characteristics of the commonly accepted elements of literary excellence. Text: Minto, *Manual of English Prose Literature.* The course is conducted by recitations, reports and occasional lectures.

Thirty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

†231. Social and Ethical Forces in English Literature in the Eighteenth and Nineteenth Centuries.

Professor Compton.

This course is identical in content with English 31.

Prerequisite for credit: English 1 and 3, or equivalents. Spring term: two hours a week; 2 credits. Fee, $10.

†232-†233. **Currents in Contemporary Literature** (British and American). *Professor Stair.*

This course aims to orient students in the bewildering variety of elements in contemporary literature. Lectures are given on the foundations of our period and its principal tendencies. Some of the topics are: The Decadents, Realism and Naturalism, Symbolism, Impressionism, The New Psychology in Literature, The New Poetry, Oriental Influences, The Renascence of the Drama, The Irish Movement. Important authors are also taken up individually, and their work is examined in its relationship to the social, intellectual and artistic currents of the day.

Prerequisite for credit: English 1 and 3, or equivalents. Two terms, two hours a week; 2 counts each term. Fee, $5 a term.

†234. **Contemporary Drama in English.** *Professor Stair.*

This course studies the significant dramatic activities since 1890 in England, Ireland, and the United States. The chief foreign influences are noticed, and technique is considered; the course thus serves as an introduction to the study of modern drama. Besides a survey of the plays of Jones, Pinero, Wilde, Shaw, Barrie, Synge, Galsworthy and others, there is a discussion of such topics as The Poetic Drama, The One-Act Play, The Photo-Drama, Gordon Craig and the New Art of the Theatre. Lectures, readings, reports, and discussions.

The class is limited to forty students.

Prerequisite for credit: English 1 and 3, or equivalents. Two hours a week; 2 credits. Fee, $7.50.

241-2. **Great Classics of Literature.** *Professor Horne.*

By lectures, discussions and readings this course studies the outlines of the world's literature as a whole, and the development of civilization as illustrated in the most celebrated classics. The course should result in a more intimate knowledge of the Great Classics not as isolated books but as the chief voices of the social and philosophic outlook of successive epochs.

Two terms, two hours a week; 2 credits each term. Fee, in the Evening Session, $10 a term. In the School of Education (Commerce Building), Registration fee, $2.50 each term; tuition, $5 each term.

250. **Dramaturgy: Technique of Play Writing and Play Production.** *Prof. Grendon.*

The course embraces an analysis and discussion of the essentials of play-making. Students will be encouraged to write at least one one-act play. During the session, two or three short plays will be put into rehearsal under the supervision of professional players, the casts for these pieces being drawn from the class. Plays written by

the students may be included in the program of production. This is a laboratory course and will deal with the practical business of playwriting and producing. No promise is given, however, to make finished playwrights or accomplished actors of students taking the course.

Ninety hours, thirty weeks; 3 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $27.50.

See also among **Special Courses** (pages 224-226):

Business English, *M. Saphier.*
Mechanics of Composition,
The Short Story, *Dr. Gaston.*
Poetry Writing, *Dr. Lieberman.*

GEOLOGY

While no course in the Department of Geology is strictly prerequisite for another, the student is advised to take the courses in sequence.

No student should elect anthropology who has not had a good training in human anatomy and physiology.

***1. Elementary Geology.** *Professor Sickels and Mr. Butler.*

An introductory course dealing with the materials of which the earth is formed and their arrangement, the processes and agents which have been and are at work in bringing about changes in the earth's crust. The laboratory work consists of the study of the more common rocks, topography and map interpretation with field work.

Prescribed for students in Science; elective for others. One lecture, one recitation and two laboratory hours a week; 3 credits.

12. Mineralogy. *Professor Sickels.*

This includes the study of the physical and chemical properties of minerals, and their determination by means of blow-pipe analysis. Reference: Dana.

Two lectures and two laboratory hours a week; 3 credits.

13. Crystallography. *Professor Sickels.*

This course treats of the geometric forms of minerals, their measurement and the laws which govern crystallization, together with the study of the different systems of crystals.

Spring term; two lectures and two laboratory hours a week; 3 credits.

24. Paleontology. *Professor Sickels.*

A study of fossil plants and animals with particular reference to evolution. Texts: Zittell and Dana.

Spring term; two lectures and three laboratory hours a week; 3 credits.

25. Historical Geology. *Professor Sickels.*

This course continues the work of Geology 1 and deals with the stratigraphic history of the earth. Laboratory work will include the making of maps and field trips to points of interest in and near the city. Text: Cleland.

Fall term; two recitations and three laboratory hours a week; 3 credits.

26. Economic Geology. *Mr. Butler.*

A study of the origin, areas of deposit, the mining and uses of commercial minerals and rocks. Text: Ries.

Fall term; two recitations and two laboratory hours a week; 3 credits.

31. **Anthropology.** *Professor Sickels.*

This course deals with the natural history of man, his comparison with the lower animals, apes and primitive man, his structure, racial variations, his origin, development and distribution. References: Duckworth, Brinton and Osborn.

Spring term; two lectures a week; 2 credits.

The biological and geological departments have a combined library of about sixteen hundred volumes in Room 316, which is open daily to students. The Steers and Warburg funds aid materially in the acquisition of books and periodicals. The library receives thirty-one journals.

The museum of the departments of Geology and Biology contains many thousand specimens, named, arranged and classified for reference and study. The greater part of the collections is in the large Room 300. Among recent additions are the gift of a valuable collection of meteorites, in the Lincoln Corridor, and the set of McGregor reproductions of prehistoric men.

In 1917, an alumnus, in addition to other valuable gifts, donated a fund of five thousand dollars, the income of which is to be expended for the department of Geology.

GERMAN

Courses 1-4 are prescribed for students in Arts who have chosen German as their second language.

Students in Science who have selected German to meet their requirement of one year of language study may take either Courses 1 and 2 or Courses 7 and 8 if they have presented two units of German for admission to College. If they have presented three units, they will take Courses 3 and 4. Students in Social Science will take Courses 1 and 2 or Courses 3 and 4 according as they have presented two units or three for admission.

*1. Intermediate.

Schiller's *Wilhelm Tell,* Harris' *Composition,* Part III, and Schurz's *Lebenserinnerungen.* The last named is read at sight one hour each week, and for this hour no preparation is required.

Four hours a week; 3½ credits.

*2. Intermediate (Continued).

A prose text: Freytag's *Aus dem Staate Friedrichs des Grossen;* Harris' *Composition,* Part IV, and Schurz's *Lebenserinnerungen* at sight, as under German 1.

Four hours a week; 3½ credits.

3. Advanced.

Schiller's *Wallenstein* and composition.

Four hours a week; 3½ credits.

4. Advanced (Continued).

Goethe's *Iphigenie* or *Torquato Tasso,* and Hebbel's *Agnes Bernauer,* with sight reading from Goethe's autobiography and Klenze's *Deutsche Gedichte.*

Four hours a week; 3½ credits.

7-8. Intermediate.

Scientific German and Composition. Scholz's *Scientific German Reader.* Schurz's *Lebenserinnerungen* at sight, as under German 1 and 2.

Two terms, four hours a week; 7 credits.

12. Goethe's Faust. *Professor von Klenze.*

This course may be considered as a direct sequel to German 4 and as a preparation for any work to be done in the literature of the 19th Century. Part I read, Part II discussed. Lectures and reports.

Prerequisite: German 4. Spring term, three hours a week; 3 credits.

13. History of German Literature from the Earliest Times to the Classical Period. *Professor von Klenze.*

This course is necessary for anyone who wishes to teach German, and who must, therefore, be acquainted with the ancient literary forms of which the modern forms are the successors. Francke's *Die Kulturwerte der deutschen Literatur,* Thomas' *German Anthology.* Lectures and reports.

Prerequisite: German 4. Three hours a week; 3 credits.

14. The Classical Period of German Literature. *Professor Kost.*

A study of Goethe and Schiller, together with their immediate forerunners and contemporaries, to which is added a consideration of the Romantic School. A reading of suitable texts and commentaries will be required.

Prerequisite: German 4. Fall term, three hours a week; 3 credits.

31. Advanced German Composition. *Professor Kost.*

Original German compositions and translations of selections from important English and American authors.

Prerequisite: German 2 or 8. Fall term, two hours a week; 2 credits.

34. History of the German Language.

Presents the evolution of the Germanic dialects from the Pre-Germanic, as well as the establishment of a literary language on the dialect foundation. Grimm's Law and Verner's Law receive full treatment, and the student makes use of Victor Henry's *Grammaire comparée de l'anglais et l'allemand* and Streitberg's *Urgemanische Grammatik.*

Prerequisite: German 4. Three hours a week; 3 credits.

41-42. Elementary.

Pronunciation, essentials of grammar, elementary phraseology, reading and translation. Whitney and Stroebe's *A Brief Course in German,* and Hillern's *Höher als die Kirche.*

Elective; may be taken as a third language in Arts. Two terms, three hours a week; 3 credits each term.

43. Narrative Prose.

Gerstäcker's *Germelshausen* and Schurz's *Lebenserinnerungen* or other similar texts.

Prerequisite: German 41-42. Spring term, three hours a week; 3 credits.

44. Poetic Text.

Schiller's *Wilhelm Tell.* Harris' *Composition,* Part III.

Prerequisite: German 43. Fall term, three hours a week; 3 credits.

51. Elementary German.

A course for beginners; intended to be the equivalent of a year of high school work.

Five hours a week.

Courses 51-54 are special courses for students who have been admitted to College with less than the required preparation in languages, to enable them to remove an entrance condition.

53. Second Year German.

Three hours a week.

54. Second Year German (Continued).

Three hours a week.

***111. Commercial German.**

Acquisition of a commercial vocabulary in writing and speaking. Kuttner's *Commercial German,* Part I.

Prerequisite: two years of German. Fall term, three hours a week; 3 credits.

***112. Commercial German** (Continued)

Reading and writing of commercial forms and documents. Kuttner's *Commercial German,* Part II, and commercial newspapers and reports.

Prerequisite: German 111. Spring term, three hours a week; 3 credits.

201. Comparative Literature of Modern North Europe.

Professor von Klenze.

This course presents a study of the main currents of modern literary life in the Scandinavian countries, Russia, and Germany, preceded by lectures on the aims of the comparative study of literature.

After a rapid survey of the political and literary evolution of Norway and Sweden, attention is centered on Björnson, Ibsen, and Strindberg, Selma Lagerlöf and Knut Hamsun. A concise treatment of the political and literary history of Russia is followed by a brief discussion of Pushkin, Lermontov, and Gogol; and a more detailed analysis of Turgeniev, Dostoievsky, Chekov, Gorky, and Andreyev. Lastly, two lectures on the political history and main literary personalities of Germany serve as an introduction to a careful discussion of the chief contemporary German and Austrian dramatists. such as Hauptmann, Sudermann, Schnitzler, and Wedekind; of the lyricists Rilke, Liliencron, Arno Holz, George, Dehmel; the representative novelists, Thomas Mann, Ricarda Huch, Schnitzler; culminating in a presentation of the significance of the philosophy of Nietzsche. Lectures, assigned reading, essays.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

GOVERNMENT AND SOCIOLOGY

Government and Law

****1. American Government and Citizenship.**

Professor Duggan.

This course is based upon an analysis of the Constitution of the United States and follows that organic law in all its manifestations and functionings as an instrument of organization of land, people, government and liberty. The various organs of government will be studied as they reflect public opinion and enforce the collective will. The course treats such subjects as the political population, naturalization, enfranchisement, party organization, primaries, initiative, referendum, recall, organization of the will of the states in legislatures and executive departments, the courts, diplomatic agencies, and the citizen at home and abroad.

Prescribed. One lecture and two recitations a week; 3 credits.

***11. American Constitutional Law.** *Professor Guthrie.*

An interpretative study of the Constitution of the United States in the light of the actual workings of the governmental system. Text, lectures, discussions and case reports.

Fall term, three hours a week; 3 credits.

***12. International Law.** *Professor Guthrie.*

A study of the rules controlling the relations between nations. Text, recitations, discussions and case reports.

Spring term, three hours a week; 3 credits.

13. Political Theory. *Professor Guthrie.*

This course outlines the evolution of the State and presents historic and present political theories. American political theory is emphasized. Texts, lectures, recitations and student reports.

Fall term, three hours a week; 3 credits.

***14. Comparative Government.** *Professor Guthrie.*

This course outlines the chief foreign governmental systems and studies the systems of governing colonies and dependencies. Lectures, text, recitations and reports by the students.

Spring term, three hours a week; 3 credits.

***15. State Legislation and Administration.** *Professor Guthrie.*

This course treats law making and law administration in American states, especial attention being given to New York State. Various local executives of state law will be studied at close range. Detailed

attention will be given to the powers and duties in New York State of state assemblymen and senators and executive officers and to the daily workings of the Assembly, the Senate and the Executive departments. Disputed areas of legislative and executive competency will be studied through leading cases in the Court of Appeals. Lectures, readings, reports and field trips to government bureaus and agencies, discussions.

Fall term, 1921, three hours a week; 3 credits.

*16. Administrative Law in the United States.

Professor Guthrie.

This course covers the distribution of power between city, state and nation; the distribution of authority among departments of government; the means whereby administrative officers enforce the laws and the forms of remedy and redress of the citizen against the abuse of public power. It treats of the nature and liability of public corporations as cities, counties and towns, their power to borrow and their obligations under contract. It discusses the means whereby public officers collect taxes levied in the various taxing districts.

Fall term, 1922, three hours a week; 3 credits.

17. Roman Law.

This course is identical with Latin 36; see page 118 for description.

Prerequisite: at least two years of Latin. Spring term; three hours a week; 3 credits.

21. City Efficiency.

Making a city the best place in which to live and to work and an effective aid in individual advancement. The physical plant of a city; city planning and building; districting; terminals; street and park systems; residential areas. Social environment, conditions of living, physical, intellectual and social; health, recreation and welfare; community organizations and clubs. Governmental efficiency. Assigned readings, lectures, reports and practical problems.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

22. Community Promotion.

The application of modern methods of business development to the massed industry of the community. Scientific location; industrial city planning; industrial surveys; eliminating business wastes; business betterments; extending present enterprises; securing new industries; community influence; publicity community industrial organizations; plan and organization; finance; membership work; community education; committee system.

Assigned readings, lectures, reports and practical work.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

***23. Municipal Administration.** *Professor Guthrie.*

A study of the organs of city administration with special attention to the City of New York. The powers and the duties of all officials of New York City, of the Board of Estimate, of the Board of Aldermen and of the various city departments will be treated in some detail. Concrete illustrative material will be used and visits will be made to Board sessions and to departmental headquarters. Lectures, readings, discussions and field trips to city departments and bureaus.

Spring term, 1922, three hours a week; 3 credits.

***25. Public and Municipal Finance.**

This course is identical with Economics 25. (See p. 121.)

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

101. American Government and Politics. *Professor Guthrie.*

The subject matter of this course is substantially the same as that of Government 1.

Thirty hours, twenty weeks; 2 credits. Commerce Building. Registration fee, $2.50.

Sociology and Statistics

s*5. Elements of Sociology. *Professor Guthrie.*

This course offers an introduction to the study of society. It treats of the origin and development of human institutions, of the principles of organization and the motives of group action. The laws of association, progress and social control are considered; the problems of adjustment, co-operation and uplift are indicated. Lectures, text and discussions.

Prescribed for Social Science students. Three hours a week; 3 credits.

52. Elements of Ethnology.

An introduction to the study of social groups. The characteristics and achievements of the more important races and nations of the world, their customs and civilization. A comparison of the essential social institutions actually in effect to-day. Text-books, papers and discussions.

Spring term, three hours a week; 3 credits.

53. Applied Sociology—Philanthropy.

This course presents the facts and causes of poverty, describes methods of public and private relief, discusses the care of defectives, and indicates lines of constructive philanthropy. Special attention is given to the organization and work of local charitable institutions. Required readings, visits, student reports, lectures and discussions.

Co-requisite: Economics 1. Spring term, three hours a week; 3 credits.

*54. Applied Sociology—Criminology.

This course deals with the character, causes and treatment of crime. It describes the criminal, his trial and punishment. Especial study is made of local courts, reformatories, and preventive agencies. Required readings, student reports, lectures and discussions.

Co-requisite: Economics 1. Fall term, three hours a week; 3 credits.

56. Public Recreation.

The organization and social functions of indoor and outdoor recreation—parks, playgrounds and gymnasia; theatres, concerts and social centers. Physical, mental and moral effects of group play. Examples of public agencies here and abroad. Required readings, papers and discussions.

Spring term, three hours a week; 3 credits.

*57. Statistics.

The quantitative analysis of social groups. Introductory study of averages, variations and probability. Use of short methods and mechanical devices for calculation. Criticism of data, tabulation and graphic methods. Investigation of problems in demography, vital, administrative, moral and educational statistics. Text, laboratory, reports and discussions.

Prerequisite: Economics 1. Two recitations and two hours laboratory; 3 credits.

58. Applied Statistics—Social Investigation.

The purpose of this course is to acquaint the student with the best methods of obtaining and presenting facts regarding communities and institutions. Model surveys, reports and exhibits are analyzed and discussed. Assigned reading, field work, lectures and discussions. Open to seniors.

Prerequisite: Sociology 5 and 57. Fall term, two hours seminar, two hours laboratory and two hours field work; 4 credits.

150. Immigrant Background: The Social and Cultural Background of the Peoples of Greater New York.

A course for social workers, teachers, librarians, and others whose work is largely with unassimilated foreigners, to promote an acquaintance with the traditions, habits, customs and psychology of the races and nationalities represented in Greater New York.

The lectures are given by the supervisor of the course and by representative scholars, writers, editors, professional men and women chosen from each native group. Readings are assigned, with field work, and, for college credit, a thesis is required.

Sixty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $1.

HISTORY

s*1. Mediaeval and Modern History, to 1648.

Essential factors in the history and development of western Europe from the time of Charlemagne until 1648 are taken up, with special reference to origins, formations and changes—political, social and material. The object of this course is to present a comprehensive view of that formative period without the introduction of masses of detail.

Prescribed; four hours a week; 4 credits.

s*2. European History, 1648-1870.

This course deals with the political, social and economic development of Europe in the seventeenth, eighteenth and early nineteenth centuries. The growth of nationalism and democracy, and the great industrial revolution, with its accompanying social and political results, are emphasized.

Prerequisite: History 1. Prescribed; three hours a week; 3 credits.

s*3. Contemporary European History.

This course deals with the political and social history of Europe from 1870 to 1914. Special attention is paid to the growth of democracy in England and France, the national development of Germany, the Russian Revolution, the expansion of Europe and international relations.

Prerequisite: History 1-2. Prescribed in Social Science; elective in Arts and Natural Science. Three hours a week; 3 credits.

*4. The United States since 1876.

This course passes in rapid review the principal events of United States history—political, economic and social—since 1876. It is intended to furnish a background for more advanced work in modern history or in economic and social problems.

Prerequisite: History 1-2. Prescribed in Social Science; elective in Arts and Natural Science. Two hours a week; 2 credits.

11. Ancient Civilizations. *Professor Schuyler.*

A general review of Greek and Roman political and civic life. What it was and the survival of its influence to modern times. Forms of government, laws, religions, morals, literature, art, architecture, etc., are considered as factors of different values in the make-up of the old civilizations. By way of comparison the changed or distinctively new factors in the national types of to-day are considered.

Spring term, three hours a week; 3 credits.

12. Greek Governmental Systems. *Professor Brownson.*

This course is identical with Greek 35 and may be counted in either History or Greek. See page 116.

Open to students of all courses. Spring term, two hours a week; 2 credits.

15. Roman Institutions. *Professor Newton.*

This course is identical with Latin 35 and may be counted in either History or Latin. See page 118.

Open to students of all courses. Fall term, three hours a week; 3 credits.

21. English Political and Constitutional History.

Professor Moore.

This course deals with the formation of the English Constitution and traces the origin and development of those political institutions which were afterward adopted both in America and Europe. It is intended especially for those students who expect to study law or to specialize in comparative government. Lectures, collateral reading, discussions and essays.

Three hours a week; 3 credits.

25. Problems in Contemporary European History.

Professor Schapiro.

This course deals with the special problems confronting England, Germany and France at the beginning of the twentieth century. The treatment is topical, not narrative, with special emphasis on social and economic matters.

Three hours a week; 3 credits.

26. The Intellectual History of Europe During the Nineteenth Century. *Professor Schapiro.*

This course traces the development of the political and social ideals of modern Europe. It deals chiefly with the intellectual movement at the end of the eighteenth century, the rise and growth of nationalism and democracy, the theories of the Individualists and Utopians of the early nineteenth century and the theories underlying the various social movements during the latter part of the century.

Open only to seniors. Spring term, three hours a week; 3 credits.

27. The World War. *Professor Mead.*

The course outlines the fundamental and immediate causes of the great world conflict of 1914-1918. A study is made of the economic rivalries, territorial ambitions, and military alliances among the great European powers. The reactions of the war upon the United States and the part which this country played in the great struggle are emphasized. The course concludes with a study

of the work of the Peace Conference and the problems of reconstruction.

3 hours a week; 3 credits.

***31. American Colonial and Revolutionary History.**
Professor Mead.

The aim here is to trace the development of the American nation in its earlier periods rather than to deal with details of the history of the individual colonies. Emphasis is laid upon the growth of our governmental forms and special characteristics indicating the influence of European institutions upon those of America. The system of English colonial administration and the conflict of imperial and colonial interests are considered in order to understand the underlying causes of the Revolution and the growth of the spirit of independence and union.

Fall term, three hours a week; 3 credits.

32. Confederation, Union and Consolidation (1781-1828).
Professor Thompson.

The course aims to show the process by which a band of jealous, independent states grew into a union, however imperfect. The Confederation and the Constitution are studied with special reference to the sources of both, and the development of democracy and of the national idea is traced through the early administrations.

Spring term, three hours a week; 3 credits.

33. Division and Reunion (1828-1876). *Professor Mead.*

A study of the conflicting principles of states rights and nationality, centering about the slavery question, followed by a survey of the great war for the preservation of the Union and concluding with an examination of the problems of reconstruction.

Three hours a week; 3 credits.

34. Contemporary American Problems. *Professor Thompson.*

Important questions of the present generation are discussed, such as: changes in the government of the United States; the Populist and the Progressive movements; the development of the West and the disappearance of the frontier; industrialism and the growth of cities; immigration and the resulting problems; legislative experiments; the United States as a world power; relations with Latin America; the New South and the negro, North and South, etc.

Three hours a week; 3 credits.

36. Development of the State and City of New York.
Professor Keep.

The State and City are considered both for their own political and civic life and as types of state and city growth in this country.

After a survey of conditions in Colonial times and of the struggle

for self-government, the course enlarges upon the Revolutionary period and the subsequent constitutional changes and political and industrial activities under the new American régime. Attention is also given to interstate relations, local features and movements and various questions that are of interest to the citizens of New York to-day.

Fall term, three hours a week; 3 credits.

*39. Development of the South American States.

Professor Schuyler.

Beginning with a survey of conditions in Spain during the period from Ferdinand and Isabella to the death of Philip II, the general course of exploration and colony building in South America is taken up, stress being laid upon the essential differences between the Spanish and the English conception of the colony and its relations to the mother country. The most important events in the history of the colonies up to the close of the Revolutions of 1810-1826 are briefly noted, after which a careful study of the development of the more important States is made.

Fall term, three hours a week; 3 credits.

51-52. Outline of American History.

The political, social, and economic development of the United States, the first term covering the colonial, Revolutionary and early national periods, the second term covering the later national period.

Prescribed for all students who do not offer American history for admission. Two terms, three hours a week; 3 credits each term.

103. Comparative History of Modern Europe.

Professor Schapiro.

The subject matter of this course is the same as that of History 3.

Thirty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50.

127. The World War and Reconstruction.

Thirty hours; 2 credits. (Not offered in 1921-1922.)

204. Literature of American History. *Professor Mead.*

This course makes a critical analysis of the most important works on American history. The treatment is both topical and by periods.

Spring term, 1922. Thirty hours, twenty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

226. Development of Modern France. *Mr. Arbib-Costa.*

This course sets forth in systematic form the economic, social, political and cultural development of modern France. Its scope includes the physical and historical background of French life, governmental and industrial organization, educational, artistic, and literary institutions, and the present problems of reconstruction.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5.

227. Development of Modern Italy. *Mr. Arbib-Costa.*

Thirty hours; 2 credits in the School of Education. (Not given in 1921-1922)

231. Historical Development of American Institutions.

Professor Mead.

This course treats of certain broad economic, social and political forces in the United States. Students are required to make an intensive study of one or more of these subjects. The course is conducted as a seminar..

Fall, 1921. Thirty hours, twenty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

239. Development of the Hispanic-American States.

The subject matter of this course is the same as that of History 39, but with special adaptation to the requirements of teachers.

Thirty hours, twenty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

See also among Special Courses (page 231):

Review of American History and Government, with European Background, Method and Content. *Prof. Mead.*

Review of American History with European Setting, Method and Content. *Mr. Giltner.*

The Historical Museum contains a collection of American aboriginal antiquities, historical relics and rare letters of all periods of our history, numerous rare prints, maps and relics of local interest, reproductions of Roman coins and medallions, a marine camouflage exhibit, and, most notably, a collection of the papers of Townsend Harris, with the first American flag made in Japan at his request in 1858.

HYGIENE

The Department of Hygiene is made up of the divisions of Physical Training, Health Examination, Recreational Instruction, and Athletics.

Through these divisions the Department attempts to influence young men to form individual and community habits of hygiene that will lead to the acquisition and conservation of health and thus better prepare them for the physical demands of citizenship for peace or for war.

This organization gives opportunity for the development of neglected organic and neuromuscular growth, coordination and control; for the social, ethical and moral training (character building influences) that come from wisely supervised athletic and recreational experiences; and for the special conditioning that accompanies training for severe physical and physiological competitions and other tests.

Finally, preparation may be secured for life work in various phases of public health, physical training and social work.

In addition, this Department is concerned with all those influences within the College which affect the health of the student. Every reasonable effort is made to keep the institution safe and attractive to the clean, healthy individual.

Division of Physical Training.

Professors Storey, Woll and Williamson, Dr. Hansen, Mr. McKenzie, Mr. O'Neil, Mr. Dailey, Mr. McCormick, and Assistants.

1. Course One.

(*a*) Lectures: The agents that injure health.

(*b*) Physical exercise.

i. Graded mass drills.

Two-count movements, designed to give experience in mass formations and to develop obedience, alertness, and ready response to command, accurate execution, good posture and carriage and facility of control.

ii. Apparatus work. Elementary graded exercises for squads of five students each.

iii. Selected, graded, recreative indoor and outdoor games and play.

iv. Swimming.[1] Each student is required to learn to swim with more than one variety of stroke.

Prescribed for freshmen, first term, three hours a week; 1 credit.

2. Course Two.

(*a*) Lectures: The carriers of disease.

(*b*) Physical Exercise.

i. Graded mass drills. Two-count movements (continued).

ii. Apparatus work. Continuation of graded exercises for squads of five.

iii. Selected, graded, recreative indoor and outdoor games and play.

iv. Swimming. Each student is required to develop endurance in swimming.

Prerequisite: Hygiene 1. Prescribed for freshmen, second term; three hours a week; 1 credit.

3. Course Three.

(*a*) Lectures: The contributory causes and carriers of disease.

(*b*) Physical Exercise.

i. Graded mass drills. Four-count movements.

ii. Apparatus work. Continuation of graded exercises for squads of five.

iii. Selected, graded, recreative indoor and outdoor games and play.

iv. Swimming. Diving, rescue and resuscitation of the drowning.

Prerequisite: Hygiene 2. Prescribed for sophomores, second term; three hours a week; 1 credit.

4. Course Four.

(*a*) Lectures: Defenses of health.

(*b*) Physical Exercise.

i. Advanced graded mass drills. Eight-count movements.

ii. Advanced graded apparatus work, for squads of five.

iii. Selected, graded, recreative indoor and outdoor games and play.

iv. Swimming. Advanced continuation of requirements outlined for Courses 2 and 3.

Prerequisite: Hygiene 3. Prescribed for sophomores, second term; three hours a week; 1 credit.

Modified Course. *Dr. Lattin.*

In each of the above required courses provision is made for those students whose organic condition may permanently disqualify them

[1] All students in the first term in College must learn to swim one hundred feet; if they fail to meet that requirement their continuation in College will be under probation until the requirement is met.

At the end of the second term, all students who are still unable to satisfy the requirement are notified that if they do not meet the requirement before the end of the third term, they will be dropped from the College roll.

for the regular scheduled work. This special work is under the immediate direction of a medical member of the Staff.

111. Intermediate Physical Training.

This course is planned to supply the student with such organic development and efficiency as will enable him to demonstrate successfully as a teacher various type exercises for classes in elementary and intermediate indoor and outdoor gymnastics, aquatics, games, play and athletics.

Prerequisite: Hygiene 4. Three hours a week; 1 credit.

112. Advanced Physical Training.

This course is a continuation of Course 111, and is designed for the physical equipment of teachers of more advanced physical work.

Prerequisite: Hygiene 111. Three hours a week; 1 credit.

113. Class Management.

This course supplies the practical instruction and experience needed for the training of special teachers in the management of elementary and intermediate classes in various forms of physical exercise.

Prerequisite: Hygiene 112 and Biology 32. Fall term, three hours a week; 1 credit.

114. Class Management.

This course is a continuation of Course 113. It is planned to give a training in the management of more advanced classes.

Prerequisite: Hygiene 113. Spring term, three hours a week; 1 credit.

115. Control of Emergencies and First Aid to the Injured.

This course supplies instruction concerning the management and protective care of common emergencies. The instruction is practical and rational. It covers such emergencies as sprains, fractures, dislocations, wounds, bruises, sudden pain, fainting, epileptic attacks, unconsciousness, drowning, electric shock, and so on.

Prerequisite: Biology 32. Fall term, two hours a week; 1 credit.

116. Theory and Practice of Individual Instruction in Hygiene and in Departmental Sanitation.

Students taking this subject are given practical first-hand experience of special use to teachers, (a) in connection with health examination, inspection, conference, consultation, and follow-up service carried on in the departmental examining room, and (b) in connection with the sanitary supervision carried on by the Department.

Prerequisite or co-requisite: Biology 32, 41 and 148. Spring term, six hours a week in two periods of three hours each; 2 credits.

117. Physical Training and Hygiene in the Classroom.

Professor Woll.

This course is intended to give the student instruction and practise in classroom calisthenics, relief drills, classroom plays and games. Also, to teach him how to conduct the morning inspection and properly interpret the meaning of certain physical signs.

Prerequisite: Hygiene 4. Two hours a week; 1 credit in the School of Education. Open only to students in the Day Session.

Division of Health Examination

Professors Storey and Woll, and Doctor Lattin and Staff.

I. Individual Instruction in Hygiene.

This instruction is of a personal confidential character, and is given in the form of advice based upon medical history supplied by the individual, and upon medical and hygienic examinations and inspections of the individual.

(*a*) Medical and hygienic history and examination.

In this relationship with the student the Department attempts to secure such information concerning environment and habit influences in the life of the student as may be used as a basis for supplying him with helpful advice concerning the organization of his policy of personal health control. The medical examinations are utilized for the purpose of finding remediable physical defects whose proper treatment may add to the physiological efficiency and therefore to the health possibilities of the student.

Prescribed for all students one each term. No credits.

(*b*) Hygiene inspections.

These inspections are applied in the mutual interest of personal, departmental and institutional hygiene.

Prescribed for freshmen and sophomores.

(*c*) Conferences.

All students who have been given personal hygienic or medical advice are required to report in conference by appointment in order that the advice may be followed up.

All individuals found with communicable diseases are debarred from all classes until it is shown in conference that they are receiving proper medical treatment, and that they may return to class attendance with safety to their comrades.

All individuals found with remediable physical or hygienic defects are required to report in conference with evidence that the abnormal condition has been brought to the serious attention of the parent, guardian or family medical or hygienic adviser. Students failing to report as directed may be denied admission to all classes.

II. Medical and Sanitary Supervision.

(*a*) Sanitary supervision.

An advisory Committee on Hygiene and Sanitation, with the Professor of Hygiene as Chairman, has been appointed by the President. This committee has been instructed to "inquire from time to time into all our institutional influences which are likely to affect the health of the student and instructor, and to make such reports and recommendations to the President as may seem wise and expedient."

(*b*) A medical examination is required of all applicants for admission to the College. Approval of the Medical Examiner must be secured before registration is permitted.

(*c*) Medical consultation.

Open to all students. (Optional.)

(*d*) Medical examination of Athletes.

Required of all students before admission to athletic training and repeated at intervals during training season.

(*e*) Treatment.

Emergency treatment is the only treatment attempted by the Department. Such treatment will be applied only for the purpose of protecting the individual until he can secure the services he selects for that purpose.

(*f*) Conferences. See I (c).

Division of Recreational Instruction

Mr. Schmidt and Assistants.

Liberal provision is made by the College for voluntary recreational activities indoors and outdoors during six days of the week and throughout vacation periods. Emphasis is laid on recreation as a health habit and a means of social training.

Division of Athletics

(1) Athletic Supervision.

Three organizations are concerned:

(*a*) The Faculty Athletic Committee, which has to do with all athletic activities that involve academic relationships.

Professor Storey, Chairman; Professor Woll, Secretary.

(*b*) The Athletic Council, a committee of the Department of Hygiene, charged with the supervision of all business activities connected with student athletic enterprises.

Professor Storey, Chairman; Professor Williamson, Secretary.

(*c*) The Athletic Association of the student body.

(2) Athletic Instruction.

Mr. McKenzie, Mr. McCormick, Mr. Holman and Assistants.

The Department utilizes various intramural and extramural athletic activities for the purpose of securing a further influence on the promotion of health habits, the development of physical power, and the establishment and maintenance of high standards of sportsmanly conduct on the part of the individual and the group.

At present the schedule includes the following sports: baseball, basket ball, track and field, swimming and water polo, tennis, soccer football, hand ball and wrestling.

The Department of Hygiene accepts certain athletic training under the instructions of the regular teaching force of the Department as an equivalent for a part of the work in the regular courses in physical training.

All students who have achieved a record of "B," or better, for their preceding term's work in the Department, and whose practical work for that term averages 80 or better, and who are found physically fit, may substitute the full time training in basket ball, soccer football, swimming, track and field, in the regular seasons of those sports, for the required practical work in Courses 3 and 4.

"Full time athletic training" covers a full training period each day, five days a week, under the direction of the departmental instructor in charge of the athletic squad concerned.

Students in Course 2 may offer these substitute equivalents for a part of their practical work, provided they first pass a satisfactory special examination as to their physical fitness, muscular development, muscular control and health habits, but in no case may a student substitute athletic training for all the practical work in Course 2.

Students offering these athletic substitutions will not be excused from regular attendance on days of registration, enrolment, and written examinations, either final or monthly.

Students offering athletic training in substitution for regular requirements must complete the athletic training requirements in the athletic "courses" which they elected. Failure to train satisfactorily throughout the entire season of the athletic sport selected by the student will be regarded as a failure in the course for which the substitution was offered.

MATHEMATICS

s*1. Solid Geometry.

Text-book: Ford and Ammerman, *Solid Geometry.*

Prescribed for students in Science, unless presented for admission. Three hours a week; 3 credits.

s*2. Trigonometry.

Text-book: Rothrock, *Elements of Plane and Spherical Trigonometry.*

Prescribed for students in Arts and in Science, unless presented for admission. Three hours a week; 3 credits.

s*3. Advanced Algebra.

Text-book: Fite, *College Algebra.*

Prescribed for:
- Science students who do not present Advanced Algebra for admission.
- Arts students who do not present Advanced Algebra for admission, unless Mathematics 41 is elected.

Three hours a week: 3 credits.

*4. Analytic Geometry and Calculus.

Text-books: Wilson and Tracey, *Analytic Geometry;* Granville, *Differential and Integral Calculus.*

Prerequisite: Entrance Trigonometry or Mathematics 2, and Entrance Advanced Algebra or Mathematics 3. Prescribed for Students in Science; elective for students in Arts and in Social Science. Five hours a week; 5 credits.

s*5. Calculus.

Text-book: Granville, *Differential and Integral Calculus.*

Prerequisite: Mathematics 4. Prescribed for students in Science; elective for students in Arts and in Social Science. Five hours a week; 5 credits.

*6. Solid Geometry and Trigonometry.

Text-books: Ford and Ammerman, *Solid Geometry;* Rothrock, *Elements of Plane and Spherical Trigonometry.*

Prescribed for students in Social Science who do not present Solid Geometry and Trigonometry for admission. Four hours a week; 4 credits.

*7. Elements of Analytic Geometry and Calculus.

Text-book: Smith and Granville, *Elementary Analysis.*

Prerequisite: Entrance Solid Geometry and Entrance Trigonometry, or Mathematics 1 and Mathematics 2, or Mathematics 6. Prescribed for students in Social Science. Four hours a week; 4 credits.

11. Arithmetic. *Professor Whitford.*

Prerequisite: Mathematics 5 or 42. Fall term, two hours a week; 2 credits.

12. History of Mathematics. *Professor Allen.*

Prerequisite: Mathematics 5 or 42. Spring term, two hours a week; 2 credits.

13. Advanced Differential Calculus. *Professor Reynolds.*

Text-book: Williamson, *Differential Calculus.*

Prerequisite: Mathematics 5. Fall term, three hours a week; 3 credits.

14. Advanced Integral Calculus. *Professor Reynolds.*

Text-book: Williamson, *Integral Calculus.*

Prerequisite: Mathematics 5. Spring term, three hours a week; 3 credits.

***15. Ordinary Differential Equations.**

Fall term, *Professor Pedersen.*
Spring term, *Professor Reynolds.*

Text-book: Murray, *Differential Equations.*

Prerequisite: Mathematics 5. Three hours a week; 3 credits.

16. Vector Analysis. Fall Term, *Professor Reynolds.*
Spring Term, *Professor Hubert.*

Prerequisite: Mathematics 5. Three hours a week; 3 credits.

17. Differential Geometry. *Professor Reynolds.*

Text-book: Snyder and Sisam, *Analytic Geometry of Space.*

Prerequisite: Mathematics 15. Fall term, three hours a week; 3 credits.

18. Partial Differential Equations. *Professor Saurel.*

Text-book: Johnson, *Differential Equations;* Byerly, *Fourier's Series and Spherical Harmonics.*

Prerequisite: Mathematics 15 and 17. Spring term, three hours a week; 3 credits. (Not offered in 1921-1922.)

19. Theory of Probability. *Professor Linehan.*

Prerequisite: Mathematics 5 or 42. Spring term, three hours a week; 3 credits.

41. Analytic Geometry (Outline).

Text-book: Wilson and Tracey, *Analytic Geometry.*

Prerequisite: Entrance Trigonometry or Mathematics 2. Elective for students in Arts. Three hours a week; 3 credits.

42. Differential and Integral Calculus (Outline).

Text-books: Fisher, *Infinitesimal Calculus;* Osborne, *Differential and Integral Calculus.*

Prerequisite: Mathematics 41. Elective for students in Arts. Three hours a week; 3 credits.

†74. Analytic Geometry.

This course and Mathematics 75 and 76, in the Evening Session, are together equivalent to Mathematics 4 and 5.

Prerequisite: Mathematics 1, 2, and 3, or their equivalents. Prescribed for Students in Science; elective for students in Arts and Social Science. Four hours a week; 4 credits.

†75-†76. Differential and Integral Calculus.

Prerequisite: Mathematics 74. Prescribed for students in Science; elective for students in Arts and in Social Science. Three hours a week; 3 credits each term.

*120. Mathematical Theory of Investment. *Professor Philip.*

Text-book: Skinner, *The Mathematical Theory of Investment.*

Prerequisite: completion of the prescribed mathematics. Fall term, two hours a week; 2 credits.

212. Fundamental Concepts of Modern Mathematics.

Professor Linehan.

The purpose of this course is to give preliminary orientation in the modern higher mathematics, especially for those who expect to teach mathematics in the high school. Among the topics treated are the following: historical and logical development of the concepts of number (real, complex, hyper-complex), function, transformation, group, invariant; history and role of postulate-system; projective geometry and metric geometry; non-Euclidean geometry; n-dimensional geometry; geometrical constructions.

Prerequisite: Analytic Geometry and Calculus. Thirty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

MILITARY SCIENCE AND TACTICS

The students receiving instruction in this department form an Infantry unit of the Reserve Officers' Training Corps, under the command of the Professor of Military Science and Tactics, who is an officer of the United States Army. The primary purpose of the Training Corps is to qualify selected students to be reserve officers in the military forces of the United States. The design of the War Department, however, is to attain this object while the students are pursuing their general or professional studies, with the least practicable interference with their civil careers, employing methods calculated to fit them for the pursuits of peace as well as of war. The Department aims to give all students of the Corps a thorough physical training, to inculcate an appreciation of lawful authority, and to teach the fundamentals of the military profession, including the special knowledge required for various branches of the service. At the termination of their instruction they should possess, with a good general education and special training in the academic requirements of the infantry branch of the service, the essential characteristics of well balanced junior officers.

The work is divided by the War Department regulations into two parts, comprising the Basic and the Advanced Courses, each requiring two years.

The first two years' work is prescribed for all students. The privileges of a public institution in a democracy can be granted only to those who accept the duties of democratic citizenship. Hence these Basic courses are not merely required for the Bachelor's degree; they must be taken and successfully pursued if a student is to enjoy the privileges of the College. They cannot be postponed, and failure of attendance or irregularity in attendance will not be permitted.

1-2. Basic Course, First Year, Infantry.

Organization; military courtesy and discipline; drill; care and handling of arms and equipments; small-arms firing; personal hygiene and sanitation; interior guard duty; minor tactics; morale; physical training.

3-4. Basic Course, Second Year, Infantry.

The same subjects as the first year, with the addition of liaison, topography and map-reading, signaling, infantry weapons, orders and messages.

Courses 1, 2, 3 and 4 are prescribed for all students during the first four terms of their attendance at the College. Those who are admitted to the College in February, however, do not at present begin this work until the following September. Three hours a week; 1 credit each term.

The advanced work which follows is elective, but each student admitted to it must sign an agreement to complete Courses 11-14.

11-12. Advanced Course, First Year, Infantry.

Camp sanitation and care of troops in the field; minor tactics; liaison for all arms; topography; field engineering; law, common and military; military policy; drill; ceremonies; marching and care of arms and equipment; small arms firing; interior guard duty.

13-14. Advanced Course, Second Year, Infantry.

Minor tactics; topography; field engineering; musketry; company administration; military policy; history and economics; military law; military history; tactical walks; drills and ceremonies.

Courses 11-14, five hours a week; 2 credits each term.

To qualify for a commission in the Reserve Officers' Training Corps, students must attend one summer camp at the end of the first Advanced year. Students may also attend camps at the end of the first and second Basic years if they so desire and are recommended by the Department.

Uniforms, arms and equipment are provided by the Government, and, for those attending camp, transportation and subsistence in addition. For those students taking the Advanced Course, the Government pays commutation of subsistence amounting to approximately $200 per year. Upon the completion of the Advanced Course, qualified students will be selected to receive commissions in the Reserve Officers' Corps.

11. History and Appreciation of Music. *Professor Baldwin.*

A comprehensive study of the growth of music as an art, the development and analysis of musical forms, and the great composers from the standpoint of an intelligent appreciation. No practical knowledge of music is required. The work is conducted by means of lectures with ample musical illustrations, recitations, text-book study and prepared papers. Text-book: Hamilton, *Outlines of Music History.*

Two hours a week; 2 credits.

12. A Study of Modern Music. *Professor Baldwin.*

This course is intended to supplement the preceding, and is devoted to a detailed study of composers of the nineteenth and twentieth centuries, including the various phases of instrumental music since Beethoven, and the development of the modern music-drama. Lectures are given with musical illustrations; and recitations, readings and a thesis from each student upon some assigned phase of the subject are required.

Prerequisite: Music 11. Spring term; two hours a week; 2 credits.

13. Harmony. *Professor Baldwin.*

This course deals with the formation of chords and their proper relationship. The study of harmony will be carried through triads and their inversions, seventh and ninth chords, altered chords, non-harmonic tones and modulations, and will involve harmonizing both given basses and given melodies. Some practical knowledge of music is required for admission.

Fall term; two hours a week; 2 credits.

14. Advanced Harmony and Counterpoint. *Professor Baldwin.*

This course is a continuation of Course 13, and takes up the free harmonization of given or original melodies, together with melodic relationships as found in the various orders of strict counterpoint, leading to original composition in the simpler forms.

Prerequisite: Music 13. Spring term; two hours a week; 2 credits.

112. Masterpieces of Music.

This course supplements that on the History and Appreciation of Music and the subject matter of the course is similar to that of Music 12.

Thirty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50.

213. Harmony. (Special Introductory Course.)

Miss MacConnell.

This course covers the rudiments of music, terminology, chord construction through triads and their inversions, chords of the seventh and their inversions, modulations and suspensions. A study and analysis of simple forms is made. Writing from a figured bass in close and open position and the harmonization of simple melodies is required.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $12.50.

214. Advanced Harmony and Counterpoint (Special).

Miss MacConnell.

This course reviews the elementary work in Harmony and continues through chromatic chords, altered chords and pedal point. Some original work is expected.

In counterpoint the five simple species are studied with the intention of giving greater experience and facility for original work.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $12.50.

This Department also conducts the following:

Weekly Public Lectures in Appreciation of Music. Tuesday afternoons at 4.15, October to May, inclusive.

Glee Club. The object is to develop choral singing in the College, and includes instruction in the rudiments of voice production.

Orchestra. A course in orchestral training is open to all students of the College who are properly qualified, and to students of music outside of the College, in order that instruments which cannot be supplied by the college students may be secured.

Organ Recitals given by Professor Baldwin twice each week throughout the college year.

PHILOSOPHY

s*1. Introduction to Philosophy.

Professors Overstreet, Cohen, J. P. Turner and Marsh.

An analysis of the great views that have been presented in the history of thought as to the nature of man and the cosmos.

Prescribed; three hours a week; 3 credits.

***2. History of Philosophy: Ancient and Medieval.**

Professors Overstreet, Cohen and Turner.

A study of the leading philosophical points of view developed in ancient and medieval thought.

Fall term; three hours a week; 3 credits. May be taken independently of 3. Prescribed for Social Science students unless 3 is taken.

***3. History of Philosophy: Modern.**

Professors Overstreet, Cohen and Turner.

A study of the leading philosophical points of view developed in modern thought.

Spring term; three hours a week; 3 credits. May be taken independently of 2. Prescribed for Social Science students unless 2 is taken.

***12. Logic and Scientific Method.** *Professor Cohen.*

This course aims to acquaint the student with the main principles of deductive and inductive inference and with some of the more specific methods of scientific thinking and research.

Three hours a week; 3 credits.

13. Philosophy of Science. *Professor Cohen.*

A study of the logical and metaphysical problems presented by the mathematical, natural and social sciences. The aim of the course is to deepen the student's insight into the nature of scientific method and the world-view based on it. The work is carried on partly through reports on memoirs which have had an important influence in the history of science.

Prerequisite: completion of all the prescribed Science work and Philosophy 12. Fall term; three hours a week; 3 credits.

14. Philosophy of Law. *Professor Cohen.*

A study of the ethical and metaphysical principles at the basis of our judicial procedure and social legislation. The leading features of the Roman and the common law, and such topics as the theory of property, contract, tort, etc., will be studied. The aim of this course is to place the student in a better position to estimate the resources of the law as a factor in the ethical transformation of society.

Lectures and reports on selected readings from such works as Sohm's *Institutes of Roman Law,* Markby's *Elements of Law,* Bentham's *Theory of Legislation,* Salmond's *Jurisprudence,* and the *Modern Legal Philosophy* Series.

Spring term; three hours a week; 3 credits.

15. Philosophy of Civilization: Part I. *Professor Cohen.*

A critical analysis of the various theories of civilization and progress that serve as bases of judgment on the ethical aims of national and international action.

Fall term; three hours a week; 3 credits. May be taken independently of 16.

16. Philosophy of Civilization: Part II. *Professor Cohen.*

A study of the meaning and basis of art, religion, literature and science as social institutions and as giving value to human endeavor.

Spring term; three hours a week; 3 credits. May be taken independently of 15.

17. Social Philosophy. *Professor Overstreet.*

A study of the relation between social activities, institutions, etc., and the fundamental aims of life.

Spring term; three hours a week; 3 credits.

18. Contemporary Philosophy. *Professor Overstreet.*

A study of the current movements of philosophical thought, particularly the pragmatism of James and Dewey, the evolutional creationism of Bergson, and the neo-realism of the English and American schools.

Prerequisite: Philosophy 2 or 3. Fall term; three hours a week; 3 credits.

Psychology

s*5. General Psychology. *Professors Turner and Marsh.*

This course is introductory to all the following courses in Psychology. Its object is to present the essential facts and laws of behavior and to indicate their bearing upon the various practical interests of life, such as education, law, medicine, politics, business, etc. Recitations, demonstrations and experimental work.

Prescribed for students in Social Science. Three hours a week; 3 credits.

53. Psychology of the Intellectual Processes. *Professor Marsh.*

A general study of perception, imagination, memory, judgment, reasoning, etc., together with training in experimental practices and analysis of these capacities in the student. The course exhibits current methods and devices used in mental testing and studies the

import of individual likenesses and differences. It also guides each student in gauging his own intellectual caliber by means of standardized measures.

Prerequisite: Philosophy 5. Fall term; three hours a week; 3 credits.

54. Psychology of the Volitional Processes. *Professor Marsh.*

A course in the psychology of attention, motive, will, habit, morale, leadership, etc., with applications to the problems of personnel and performance, both in industry and in recreation, and with vocational suggestions to the student. Especial study is given to psychographs of persons successful in their pursuits and to the experience of corporations now utilizing psychological methods.

Prerequisite: Philosophy 5; 53 is advised. Spring term; three hours a week; 3 credits.

55. Abnormal Psychology. *Professor Turner.*

This course is offered with particular reference to the needs of students who plan to enter the medical profession; but it is designed also for students whose interest in psychology is more general. The special field traversed is suggested by the topics treated: hysteria, multi-personality, dreams, suggestions, etc. Lectures, recitations and clinical visits.

Prerequisite: Philosophy 5. Spring term; three hours a week; 3 credits.

*56. Social Psychology. *Professor Turner.*

A study will be made of the psychological factors underlying social relations; the basis of institutions in original nature; the varieties of crowd behavior; the mental qualities of the criminal; the relation of climate to racial characteristics, etc. Analysis will be made of such conceptions as suggestion, imitation, progress, invention, etc.

Prerequisite: Philosophy 5. Fall term; three hours a week; 3 credits.

57. Current Psychological Theory. *Professor Turner.*

The work of Course 5 is continued in a more intensive manner, attention being given to the more striking tendencies of the day. After a brief historical survey, the present situation in the field of psychology is presented in an effort to evaluate the work of the chief writers. Lectures, student reports, recitations and discussions.

Prerequisite: Philosophy 5. Spring term; three hours a week; 3 credits.

58. Genetic Psychology. *Professor Marsh.*

This course is a study of the steps and results of mental growth. Genetically, the course examines the origin and evolution of the

mind; and comparatively, it relates plant and animal, child and adult, normal and abnormal, individual and social, material and spiritual phases of the self. For a full understanding of mental powers, of their acquisition and training, and of personality in its social outlook, a genetic and comparative study is fundamental. Lectures, experiments and reports.

Prerequisite: Philosophy 5. Fall term; three hours a week; 3 credits.

71. Educational Psychology.

This course is identical with Education 16. (See page 132.)

Prerequisite: Philosophy 5. Three hours a week; 3 credits.

72. Mental and Educational Tests.

This course is identical with Education 76. (See page 143.)

Prerequisite: Philosophy 5. Three hours a week; 3 credits.

PHYSICS

Courses 1 and 2 are elementary courses intended for students who do not offer physics for entrance. The study is pursued by means of lectures, recitations and individual laboratory exercises. Students are held strictly accountable for all the apparatus assigned to their use, and must replace any lost by breakage or wasted through carelessness.

Courses 3-6 are intended more especially as a fundamental preparation in college physics for students of science.

Courses 11-32, which are *elective,* are offered with two objects in view: to enable a student to continue his training in theoretical physics by the choice of a subject in which the mathematical treatment of physical problems serves to show the adaptability of mathematics to the investigation of natural phenomena; or to begin his preparation for engineering and technical work by choosing subjects involving the application of physics and mathematics to practical problems.

s*1-s*2. Elementary Physics.

Text-book: Millikan and Gale, *A First Course in Physics.*

Prescribed for all students who do not offer physics for admission. Two terms; two laboratory and three recitation and lecture hours a week; 6 credits.

s*3-s*4. General Physics.

Text-book: Kimball, *College Physics.*

Prerequisite: Elementary Physics. Prescribed for students in Science and in Social Science. Two terms; one lecture and two recitations a week; 4 credits.

s*5. Laboratory on Topics in Course 3.

This includes the following: the study and use of the micrometer, the Joly, torsion, and chemical balances, thermometers, hydrometers, the study of torque, angular velocity and acceleration and their relation to rotational mass, simple harmonic motion, the determination of "g," specific gravity of liquids, specific heat and latent heat, expansion coefficients, the mechanical equivalent of heat, and the heat of combustion of gas.

Co-requisite or prerequisite: Physics 3. Prescribed for students in Science. Two hours a week; 1 credit.

s*6. Laboratory on Topics in Course 4.

The following are some of the exercises: the study of lenses and optical instruments by means of the optical bench; spectrometry, photometry, polarimetry, spectroscopy; the study of direct current

circuits involving the use of measuring instruments; the transformation of electrical energy into light and heat, including the testing of lamps and heaters; the magnetic circuit; the storage battery; thermoelectric phenomena.

Prerequisite: Physics 5. Co-requisite or prerequisite: Physics 4. Prescribed for students in Science. Two hours a week; 1 credit.

*7. Problem Work on Topics in Course 3.

Prescribed for Engineering students. Two hours a week; 1 credit.

*8. Problem Work on Topics in Course 4.

Prescribed for Engineering students. Two hours a week; 1 credit.

*11. Electricity and Magnetism.

General principles, electrostatics, magnetostatics, and electrodynamics; theory of the direct current circuit, and introduction to the theory of alternating currents.

Prerequisite: Physics 4 and Mathematics 5. Four hours a week; 3 credits.

*12. Mechanics.

Kinematics; fundamental dynamical principles; statics of particles and rigid bodies, including framed structures; kinetics of particles and rigid bodies. Vector methods are frequently employed. Numerous problems are solved, graphically and analytically.

Text-book: Slocum, *Theory and Practice of Mechanics.*

Co-requisite or prerequisite: Mathematics 5 and Physics 4. Five hours a week; 4 credits.

*13. Heat.

General principles; thermometry and pyrometry; conduction and radiation; kinetic theory of gases; thermodynamics.

Prerequisite: Mathematics 5 and Physics 4. Fall term, four hours a week; 3 credits.

14. Wave Motion and Light.

A general course in the theory of wave motion and a more advanced study of the principal phenomena of sound and light.

Prerequisite: Physics 4 and Mathematics 5; three hours a week; 3 credits.

16. Introduction to Mathematical Physics.

General properties of vectors and vector operators; the theorems of Gauss, Green, Stokes, Helmholtz; the partial differential equations of the potential theory, and of the flow of heat and electricity; Fourier's series; the general mathematical treatment of oscillations and of wave propagation.

The course is one of lectures, discussions, and reports.

Prerequisite: Physics 12. Spring term, four hours a week; 3 credits.

21. Advanced Laboratory Course.

The experiments are designed to elucidate the principles and theory taken up in Courses 11, 12, 13 and 14. The selection of experiments may depend on the courses in physics taken and also on the special interest of the student in physics, chemistry, medicine, engineering, or mathematics. Students are advised to elect this work in connection with Courses 11, 12, 13 and 14.

Prerequisite or co-requisite: an elective course in Physics. Four hours a week; 2 credits.

*31. Descriptive Astronomy.

A study of the systems of coordinates, sun, moon, planets, eclipses, tides. Lectures and recitations are supplemented by observations. The Newcomb Library is available for reference. Text-book: Young, *Manual of Astronomy*.

Fall term, four hours a week; 3 credits.

32. Elementary Practical Astronomy.

Determination of time, latitude, longitude and azimuth; practice with the sextant and transit. The two small towers on the main building are fitted up with instruments and conveniences for this purpose, especially adapted to the needs of civil-engineering students.

Spring term, four hours a week, divided between lectures, recitations, and observations; 3 credits.

PUBLIC SPEAKING

The purpose of the prescribed work of this department is the development of the art of public speaking. In Courses 1-4 the students are first trained in the principles of expression and their elocutionary application, during the freshman and sophomore years; and then, in Courses 5-8, in public speaking proper, during the junior and senior years. The first, which treats the manner of delivery, is a necessary preparation for the second, in which, all the speeches being original, the emphasis is placed on the thought and structure. All the prescribed courses (1 to 8) must be taken in sequence.

Classes are formed to give special help to those who, because of foreign birth or foreign influences, do not pronounce the English language well, and for those who have some impediment of speech, as lisping or stuttering.

s*1. Vocal Expression.

Professors Redmond and Mosher; Messrs. Schulz, Healy and Coulton.

The aim is to develop a correct, convincing and attractive style of oral delivery. Proper breathing, distinct enunciation and the operation and control of the voice, with reference to quality, pitch, rate and force are studied and developed by a large amount of speaking in the class-room. Particular attention is devoted to overcoming speech faults, such as dialect sounds, drawling, monotony, sound-clipping, indistinctness, bad phrasing, lisping, nasal or throaty voice, etc. In brief, a clean-cut, accurate, agreeable and forceful use of the voice in English speech is the central idea of the course. Textbook: Palmer and Sammis, *Principles of Oral English.*

Prescribed; one hour a week; 1 credit.

s*2. Visible Expression.

Professors Redmond and Mosher; Messrs. Schulz, Healy and Coulton.

The purpose is to inculcate a thorough understanding of the nature of expressive gesture, and to develop in the students a habit of easy, effective action in delivery. To this end, the function of facial expression and the postures and movements of the body, limbs, head and hands are carefully analyzed and explained. The various lines of action and the several forms of the hand in gesture are considered strictly from the point of view of their expressiveness to the audience. The idea is to replace awkward, aimless, distracting motions by skillful, purposeful expression. As in Course 1, the work

is conducted with constant emphasis on the actual speaking of the student to accustom him to unobtrusive, spontaneous action. Textbook: Mosher: *Essentials of Effective Gesture.*

Prescribed; one hour a week; 1 credit.

s*3. Prose Declamation.

Messrs. Hatch, Schulz, Healy and Coulton.

An extended and co-ordinated application of the fundamental principles developed in the preceding courses. The students are required to make an analysis of the intellectual and emotional content of all selections, as a preparation for sympathetic, intelligent delivery. Much time is devoted to actual practice in speech, with the aim of cultivating the mental and physical habits requisite for effective delivery.

Prescribed; one hour a week; 1 credit.

s*4. Poetry Declamation.

Messrs. Hatch, Schulz, Healy and Coulton.

An adaptation of the aims and methods of the preceding course to the declamation of poetry. Stress is laid on the understanding and appreciation of the specific features which distinguish poetry from prose, such as rhyme, metre and distinctive emotional qualities. Especial attention is also given to the development of a fitting and skillful technique in the expression of verse forms.

Prescribed; one hour a week; 1 credit.

s*5. Debate. (First Term.)

Professors Redmond and Mosher; Messrs. Schulz and Coulton.

The students are first acquainted with such fundamental matters of debate as sources of material, analysis of a proposition, brief-making, speech construction, types of argument and common fallacies. Following this, the preparation of briefs and participation in class-room debates are continued throughout the course. Each debate is criticised by the instructor.

Prescribed; one hour a week; 1 credit.

s*6. Debate. (Second Term.)

Professors Redmond and Mosher; Messrs. Schulz and Coulton.

A continuation of the practice of debate. After a review of principles, debates and criticism are resumed. Briefs are required as in Course 5. More attention is given to refutation, both in the student's preparation and in his critical analysis of his opponent's case in debate.

Prescribed; one hour a week; 1 credit.

s*7. **Extemporaneous Speaking.** (First Term.)

Professors Palmer and Redmond.

The aim is chiefly to develop the student's capacity to think while before an audience and to express himself clearly, forcefully and persuasively without having previously written and memorized his address. Preparation is confined to gathering material and outlining the points of the speech.

Preliminary lectures deal with organization of material, outlining of speeches, oral composition with respect to clearness, coherence and emphasis, style of delivery, the speaker's relation to his subject and his audience. These factors are directly applied to the preparation and delivery of student speeches in the class-room. During the term several seven-minute speeches will be presented by each member of the class.

Prescribed; one hour a week; 1 credit.

s*8. **Extemporaneous Speaking.** (Second Term.)

Professors Palmer and Mosher.

The aim is, first, to cultivate the student's ability to make a more sustained extemporaneous address than was attempted in Course 7, and, secondly, to develop readiness and skill in discussing addresses presented by others. The convention method is followed in the conduct of the course. At each meeting of the class one member of the class delivers a twenty-minute speech on a previously announced subject. This is followed by several five-minute discussions by other members. The leading speaker then summarizes the entire proceedings of the period.

Prescribed; one hour a week; 1 credit.

11. Science of Debate. *Mr. Schulz.*

The regular junior work in the art of debate is supplemented by a careful consideration of the science that underlies the art. Specimens of argumentation illustrating the different forms of reasoning are studied, until the student is able immediately to classify any argument presented to him and point out its vulnerable points. The several classes of fallacies are examined with the two-fold purpose in view (1st) of enabling the student to detect fallacies, and (2nd) of enabling him to make clear to an audience the fact of fallacy and the reason for it.

Elective. Prerequisite: Public Speaking 3 and 4. Spring term, two hours a week; 2 credits.

12. History of Oratory. *Mr. Schulz.*

This course opens with a brief survey of the oratory of Greece and Rome, including an analysis of the classical theories and prac-

tice of the art. Against this background, the history of British and American eloquence of the 18th and 19th centuries is studied. Important speeches of the greatest orators of the latter period are presented and analyzed in class, and the situations which called them forth are discussed. The attempt is made to estimate the personalities and the influence of these outstanding figures, as well as their contributions to the traditions of their art, with the aim of understanding the practical importance of oratory in modern life and the psychological problems involved.

Elective. Prerequisite: Public Speaking 3 and 4. Fall term, two hours a week; 2 credits.

103-104. Prose and Poetry Declamation. *Mr. Schulz.*

The principles of proper breathing, distinct enunciation, and the operation and control of the voice are studied. The nature and function of gesture are carefully analyzed and explained. Students are required to make an analysis of the intellectual and emotional content of all sections, as a preparation for sympathetic and intelligent delivery. Stress is laid on the understanding and appreciation of the stylistic elements that distinguish prose from poetry and poetry from prose. Much time is devoted to actual practice in speech, with the aim of cultivating the mental and physical habits requisite for effective delivery. Throughout the course, the pedagogical problems involved in teaching declamation to children will be presented and discussed.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50.

105-106. Debate. *Professor Redmond.*

First Term.—The students are first acquainted with such fundamental matters of debate as sources of material, analysis of a proposition, brief-making, speech construction, types of argument and common fallacies. Following this, the preparation of briefs and participation in classroom debates are continued throughout the course. Each debate is criticised by the instructor.

Second Term.—A continuation of the practice of debate. After a review of principles, debates and criticism are resumed. Briefs are required as in Course 105. More attention is given to refutation, both in the student's preparation and in his critical analysis of his opponent's case in debate.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50.

107-108. Extemporaneous Speaking. *Professor Palmer.*

First Term.—The aim is chiefly to develop the student's capacity to think while before an audience and to express himself clearly, forcefully and persuasively without having previously written and

memorized his address. Preparation is confined to gathering material and outlining the points of speech.

Preliminary lectures deal with organization of material, outlining of speeches, oral composition with respect to clearness, coherence and emphasis, style of delivery, the speaker's relation to his subject and his audience. These factors are directly applied to the preparation and delivery of student speeches in the classroom. During the term several seven-minute speeches will be presented by each member of the class.

Second Term.— The aim is, first, to cultivate the student's ability to make a more sustained extemporaneous address than was attempted in Course 107, and, secondly, to develop readiness and skill in discussing addresses presented by others. The convention method is followed in the conduct of the course. At each meeting of the class one member of the class delivers a twenty-minute speech on a previously announced subject. This is followed by several five-minute discussions by other members. The leading speaker then summarizes the entire proceedings of the period.

Thirty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50.

201. Phonetics with Reference to Correction of Foreign Accent. *Mr. Schulz.*

The main business of the class is to learn to analyze organically and to distinguish by ear as many different speech-sounds as possible— a training that is indispensable to effective work with speech-habits imposed by dialect or foreign surroundings.

In addition, the psychological and pedagogical implications of such work are studied, and a correction class organized in which students may acquire skill in the detection and correction of speech errors.

Thirty hours, thirty weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

202. The Correction of Speech Defects. *Miss McNally.*

This course includes an intimate study of the anatomy, physiology and development of the vocal organs, the psychology of speech and the pedagogical principles and methods in the analysis, classification and correction of cases of defective speech.

Thirty hours, thirty weeks; 2 credits. Townsend Harris Hall. Registration fee, $2.50; tuition, $5.

203. Clinics for Speech Correction. {Section A, *Miss McNally.* {Section B, *Miss Birmingham.*

These clinics give a practical training to those desiring to become specialists in the correction of speech defects. The methods taught

are those now employed in the Department of Education of the City of New York.

Thirty hours, thirty weeks; 1 credit. Registration fee, $2.50; tuition, $5.
Sec. A. Townsend Harris Hall.
Sec. B. Brooklyn Model School.

204. Advanced Speech Correction.

Thirty hours; 2 credits. (Not given in 1921-1922.)

See also among Special Courses:
The Correction of Foreign Accents (page 226).

ROMANCE LANGUAGES

French

Courses 1-4 are prescribed for students in Arts who have chosen French as their second language.

Students in Science or Social Science who have selected French to meet their requirement of one year of language study will begin with Course 1 or Course 3 according as they have presented two units or three for admission to College.

***1. Readings in Modern French.**

Some standard works are studied. Grammar, composition, conversation. Sight-reading in modern writers.

Four hours a week; 3½ credits.

***2. Readings in Modern French.**

Some standard works (more difficult than in Course 1) are studied. Composition, conversation. Sight-reading in modern writers.

Four hours a week; 3½ credits.

***3. The Seventeenth Century.**

Studies in Corneille, Racine, Boileau. Sight-reading.

Four hours a week; 3½ credits.

***4. The Seventeenth Century.**

Molière, La Fontaine, Mme de Sévigné, and other authors. A modern work read at sight.

Four hours a week; 3½ credits.

11. The Novel in the Nineteenth Century.

With a study of the history of the novel.

Elective for those who have completed the prescribed courses in French. Fall term; three hours a week; 3 credits.

12. Poetry in the Nineteenth Century.

Some poems of former centuries are read, but the work deals mainly with the nineteenth and twentieth centuries.

Prerequisites as for French 11. Spring term, three hours a week; 3 credits.

13. Modern Drama.

History of French drama; special study of plays of the nineteenth and twentieth centuries.

Prerequisites as for French 11. Fall term; two hours a week; 2 credits.

14. Modern Drama.

Differs from French 13 merely in the choice of plays to be studied.

Prerequisites as for French 11. Spring term; two hours a week; 2 credits.

18. History of French Literature.

Especial emphasis upon portions not studied in detail in other courses.

Spring term; two hours a week; two credits.

19. Science Readings.

Prerequisite: French 3. Fall term; two hours a week; 2 credits.

21. The Eighteenth Century.

Political, social, and educational questions as found in Montesquieu, Voltaire, Rousseau, Diderot, etc.

Prerequisites as for French 11. Fall term; two hours a week; 2 credits.

31. Advanced Composition.

Prerequisites as for French 11. Fall term; two hours a week; 2 credits.

32. Advanced Composition—Continued.

Prerequisite: French 31. Spring term; two hours a week; 2 credits.

33. Advanced Study in Grammar, Diction, Methods of Teaching.

Prerequisites as for French 11. Fall term; three hours a week; 3 credits.

34. History of the French Language.

Prerequisites as for French 11. Spring term; two hours a week; 2 credits.

36. Phonetics of French. *Professor Downer.*

Designed especially for students who expect to teach French, and also for those who wish to perfect themselves in pronunciation. Theory and practice. Comparison with the phonetics of English.

Prerequisites as for French 11. Spring term, one hour a week; 1 credit.

41-42. Elementary French.

Oral work, grammar, reading, translation and composition.

Elective; may be taken as a third language in Arts. Two consecutive terms; three hours a week; 6 credits.

43-44. Intermediate French.

A continuation of Courses 41-42. Grammar, readings in modern writers, and composition.

Fall and spring terms; three hours a week; 3 credits each term.

51. Elementary French.

A course for beginners; intended to be the equivalent of a year of high school work.

Five hours a week.

Courses 51-54 are special courses for students who have been admitted to College with less than the required preparation in languages, to enable them to remove an entrance condition.

53. Second Year French.

Three hours a week.

54. Second Year French (Continued).

Three hours a week.

s*111. Commercial French.

A preliminary study of commercial French. Reading of texts dealing with commercial subjects. Business forms, documents, expressions. Exercises in correspondence.

Prerequisite: two years of French. Fall term, three hours a week; 3 credits.

s*112. Commercial French—Continued.

General notions of commerce. Divisions, office organization, buying and selling, advertising, monetary systems, banking, exchange, custom house transactions. Commercial reports and reviews are read. Exercises in correspondence.

Prerequisite: French 111. Spring term, three hours a week; three credits.

†211-†212. Commercial French.

Equivalent to French 111-112.

Prerequisite: two years of French or an equivalent. Two terms, three hours a week; 3 credits each term. Fee, $7.50 each term.

†213. Commercial French.

This course is offered only to students with a good speaking knowledge of the language. The course is conducted exclusively in French and it discusses the resources, the commercial and industrial activities and the social life of the French people.

Prerequisite: French 112 or an equivalent. Three hours a week; 3 credits in the School of Business and Civic Administration. Fee, $7.50.

French 218. History of French Literature in the Nineteenth Century (First Part). *Professor Weill.*

This course is given in co-operation with the *Alliance Française* of New York. It is the fifth part of a course on French Literature, open not only to teachers, but to all persons interested in French Literature and able to follow lectures given entirely in French.

The course covers especially what is known as the Romantic Movement in France, its origin, development and decline. Students are advised to supplement the lectures by reading the most important works, a list of which is given to them at the beginning of the term.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

241. First Year French: First Half. *Professor Laffargue.*

Thorough grounding in the elements of French, with as much conversation work as possible; careful drill in pronunciation; rudiments of grammar; easy exercises designed to cultivate readiness in the reproduction of natural forms of expression; writing French from dictation. A practical grammar is used as a text-book.

Thirty hours, fifteen weeks; 241-2 count 4½ credits. Commerce Building. Registration fee, $2.50; tuition, $5. Fall term, 1921.

242. First Year French: Second Half. *Professor Laffargue.*

Continued drill upon the rudiments of grammar, involving a fair knowledge of the syntax; constant application in the construction of sentences; reading of easy modern prose; practice in translating into French easy variations of the text read; abstracts, both oral and written, or portions of the text already read; writing French from dictation. The course is conducted in the main in French.

Thirty hours, fifteen weeks; 241-2 count 4½ credits. Registration fee, $2.50; tuition, $5. Spring term, 1922.

243. Second Year French: First Half. *Professor Laffargue.*

Reading of French of ordinary difficulty, in the historical and dramatic forms; constant drill in paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; synoptical review of grammar and syntax; practice in translation, composition and conversation; use of easy French idiomatic expressions. This course is largely conducted in French.

Thirty hours, fifteen weeks; 243-4 count 4½ credits. Commerce Building. Registration fee, $2.50; tuition, $5. Fall term, 1921.

244. Second Year French: Second Half. *Professor Laffargue.*

Reading at sight of difficult French, though not earlier than that of the seventeenth century; writing in French of short essays on subjects connected with the work read; translation into French of passages of easy French prose; practice in conversation based on plays or stories, supplemented by talks on French literature, history and travel. This course is conducted entirely in French.

Thirty hours, fifteen weeks; 243-4 count 4½ credits. Registration fee, $2.50; tuition, $5. Spring term, 1922.

201. Third Year French: First Half. *Professor Laffargue.*

Hugo's *Hernani* and Larousse's *Cours de Style* are studied. Grammar, conversation and composition.

Thirty hours, fifteen weeks. Main Building. Registration fee, $2.50; tuition, $5. Fall term, 1921.

Second Half.

Thirty hours, fifteen weeks. Registration fee, $2.50; tuition, $5. Spring term, 1922.

Course 201, entire, counts 3½ credits.

231. Special Advanced Course. *Professor Laffargue.*

This course is given to a limited class of students who have already had abundant practice in speaking, writing and understanding the language. The purpose of the course is to give fluency of expression and an appreciation of the fine shades of meaning. The method is that of direct conversation, together with practice in the writing of advanced composition.

Thirty hours, fifteen weeks; 2 credits in the School of Education. Main Building. Registration fee, $2.50; tuition, $5.

Italian

41-42. Elementary.

Oral work, grammar, reading, translation and composition.

Elective; may be taken as a third language in Arts. Two consecutive terms; three hours a week; 6 credits.

†201-†202. Commercial Italian.

1. A beginner's course in grammar, conversation, reading and writing of Italian.

2. Grammar continued, reading of modern texts, newspapers and periodicals. Business and familiar correspondence. Practice in conversation. Commercial geography of Italy. Problems of Italian immigration in the United States.

Texts: Arbib-Costa's *Italian Lessons* and *Advanced Italian Lessons*. A modern play or novel.

Two terms; three hours a week; 6 credits. Commerce Building. Fee, $7.50 each term.

241. Conversational Italian. (Beginners' Course.)

Mr. Arbib-Costa.

This course is conducted so as to enable those taking it to speak and understand Italian, to read simple prose and to write simple letters. Stress is placed on the conversational side and especially upon those words and sentences most used in conversation between teachers on one side and pupils and pupils' parents on the other.

Text: Arbib-Costa's *Italian Lessons*. Italian newspapers.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5.

242. Conversational Italian. (Second Term.)

Mr. Arbib-Costa.

This course is open to those who have completed the first course or its equivalent. The aims of the first course are continued. In addition, home reading is assigned and written reports are required. Oral composition is stressed.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5.
$10.

243. Conversational Italian. (Third Term.) *Dr. Ettari.*

This course presupposes a knowledge of the subject matter taught in the first two courses in Italian. More difficult translations from English into Italian are taken up. Composition, letter writing, idiomatic forms and conversations are continued. The student is introduced to Italian literature.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5.

244. Italian. (Fourth Term.) *Dr. Ettari.*

This course consists of readings of literary texts, writing of essays and oral discussions on assigned topics. The conversational phase is emphasized. The history of Italian literature and modern Italian literature are discussed as time and the capacity of the students permit.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5.

Portuguese

†201-†202. Commercial Portuguese.

1. Grammar and reading of easy texts. Practice in conversation.

2. Grammar. Reading of texts dealing with commercial subjects. Commercial geography of Brazil and Portugal. Business correspondence.

Texts: Brenner's *Portuguese Grammar,* Goodell's *Portuguese Commercial Reader.*

Two terms; three hours a week; 6 credits. Commerce Building. Fee, $7.50 each term.

Spanish

Students in Science or Social Science who have selected Spanish to meet their requirement of one year of language study will begin with Course 1 or Course 3, according as they have presented two units or three for admission to college.

*1. Intermediate.

A modern novel or play. Review of grammar. Composition. Sight reading in a modern writer.

Four hours a week; 3½ credits.

*2. Intermediate.

A modern novel or play. Composition. Sight reading in a modern writer.

Four hours a week; 3½ credits.

3-4. Advanced.

Studies in various authors of the seventeenth century. Sight reading.

Two terms; four hours a week; 7 credits.

11. Don Quijote.

Prerequisite: Spanish 2. Fall term, two hours a week; 2 credits.

12. Literature.

Lectures giving briefly an outline of the history of Spanish literature. Reading of extracts from the works of some of the classical authors, and the writing of short essays by the students.

Prerequisite: Spanish 2. Spring term; two hours a week; 2 credits.

13-14. The Classical Drama.

Lectures and the reading of extracts from the works of Lope de Vega, Calderón, Juan Ruiz de Alarcón, Tirso de Molina and others.

Prerequisite: Spanish 2. Fall and spring terms; three hours a week; 6 credits.

***41-*42. Elementary.**

Oral work, grammar, reading, translation and composition.

Elective; may be taken as a third language in Arts. Two consecutive terms; three hours a week; 6 credits.

***43-*44. Intermediate.**

A continuation of Courses 41-42. Reading of a modern novel or play. Review of grammar. Composition.

Fall and spring terms, three hours a week; 3 credits each term.

51. Elementary Spanish.

A course for beginners; intended to be the equivalent of a year of high school work.

Five hours a week.

Courses 51-54 are special courses for students who have been admitted to College with less than the required preparation in languages, to enable them to remove an entrance condition.

53. Second Year Spanish.

Three hours a week.

54. Second Year Spanish (Continued).

Three hours a week.

S*111. Commercial Spanish.

A preliminary study of commercial Spanish. Reading of texts dealing with commercial subjects. Business forms, documents and expressions. Exercises in correspondence.

Prerequisite: Two years of Spanish. Fall term, three hours a week; 3 credits.

s*112. Commercial Spanish (Continued).

General notions of commerce. Divisions, office organization, buying and selling, advertising, monetary systems, banking, exchange, custom house transactions. The reading of commercial reports and reviews. Exercises in correspondence.

Prerequisite: Spanish 111. Spring term, three hours a week; 3 credits.

241. Spanish Conversation and Composition.

Professor Fuentes.

This is an introductory course, similar in content to Spanish 41.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

242. Spanish Conversation and Composition.

Professor Fuentes.

A continuation of the beginners' course in Spanish. More and more attention is paid to conversation, and, as far as feasible, the work of the classroom is conducted in Spanish.

Thirty hours, thirty weeks; 2 credits. Main Building. Registration fee, $2.50; tuition, $5.

243. Advanced Practical Work in Spanish.

Professor Fuentes.

This course is designed principally for teachers of Spanish and others who wish to improve their conversational powers. It is open to those who have had one year or more of Spanish. The aim is to afford an opportunity to improve ability to understand the spoken language, to write correctly, and converse on every-day topics. Formal grammar is not studied, but important and essential grammatical points are noted and discussed as they arise.

Thirty hours, thirty weeks; 2 credits. Commerce Building. Registration fee, $2.50; tuition, $5.

244. Advanced Practical Work (continued).

Professor Fuentes.

The aims and methods in this course are as in the foregoing. In addition, the class is given more practice in writing. From time to time written reports in Spanish are required on topics connected with the matter read and discussed. Texts other than those read in class are assigned for collateral reading, and written reports. Exercises in sight reading from newspapers and magazines are given. The course is conducted entirely in Spanish.

Thirty hours, thirty weeks; 2 credits in the School of Education. Commerce Building. Registration fee, $2.50; tuition, $5.

†251. Commercial Spanish.

This is an elementary course, equivalent to Spanish 51.

Five hours a week. Commerce Building. Fee, $12.50.

†253. Commercial Spanish.

Equivalent to Spanish 53.

Texts: Fuentes' and François' *Practical Spanish Grammar* and *A Trip to Latin America;* Fuentes' and Elias' *Manuel de Correspondencia Commercial.*

Three hours a week. Commerce Building. Fee, $7.50.

†254. Commercial Spanish.

Equivalent to Spanish 54.

Review of grammar. Reading of texts dealing with commercial subjects. Exercises in correspondence and business forms. Commercial geography of Spain and Spanish America. Continued practice in conversation.

Three hours a week. Commerce Building. Fee, $7.50.

†211. Commercial Spanish.

Equivalent to Spanish 111.

Prerequisite: two years of Spanish. Three hours a week; 3 credits. Commerce Building. Fee, $7.50.

†212. Commercial Spanish.

Equivalent to Spanish 112.

Prerequisite: Spanish 111 or 211. Spring term; three hours a week; 3 credits. Commerce Building. Fee, $7.50.

†213. Commercial Spanish.

This course is offered only to students with a good speaking knowledge of the language. The course is conducted exclusively in Spanish. It discusses the resources, the commercial and industrial activities, the transportational facilities and the social life of the Latin-American countries. The statistics of import and export are presented and studied.

Prerequisite: Spanish 111-112, or their equivalent. Three hours a week; 3 credits in the School of Business and Civic Administration. Commerce Building. Fee, $7.50.

SPECIAL COURSES

The following courses are offered without credit toward degrees. They are open to either matriculated or non-matriculated students.

For a statement as to the admission of non-matriculated students, see page 47.

For a general statement as to fees, see page 90. The fees for particular courses are in all cases indicated in connection with the description of the courses.

Special courses are under the direction of the Deans of the several schools to the work of which they are related.

COURSES RELATED TO BUSINESS

Investments. *Dr. Fuld.*

This course is designed to familiarize the students with different kinds of investment and the purposes and advantages of each.

Two hours a week. Commerce Building. Fee, $8.

The Problems of Population. *Dr. Das.*

A critical study of the population question arising out of the conflict between biological impulses and physical limitations and social ideals. Physical, biological and economic elements governing birth and death are analyzed and a comparative study is made of the growth of population and the productivity of land within the last century. The principles of heredity, racial psychology, the birth rate, and the principles and purposes of eugenics are among the topics discussed.

Fall term, 3 hours a week. Main Building. Fee, $7.50.

Labor Problems. *Dr. Das.*

With a brief discussion of the psychic elements which lead to economic activities, this course reviews industrial stages through which society has passed, with special reference to the rise of capitalism. The chief classes of problems related to health and safety in industry, hours of work, wages, turnover and unemployment, and strikes and lockouts, are studied and their main issues pointed out.

Fall term, 3 hours a week. Main Building. Fee, $7.50.

Labor Movements. *Dr. Das.*

This course begins with a short review of the forces which have awakened the new social consciousness. The history of labor in Europe and America is taken up with a view to indicating the nature of labor movements under different social, political, and

economic conditions. The different types of the movements, such as trade unionism, co-operation, communism, anarchism, socialism, syndicalism, guild socialism, and the soviet, are studied with a critical analysis of their aims and methods.

Spring term, three hours a week. Main Building. Fee, $7.50.

Law Lectures for Women. *Miss O'Brien.*

These lectures are not intended to prepare women for the practice of the law, but they are intended to give the woman in the home and the woman in business a general understanding of the principles of law with which she should be acquainted in order that she may handle her business and personal affairs in a satisfactory way.

The course is conducted chiefly by lectures but there are also discussions and some assigned readings.

Four hours a week, eight weeks. Main Building. Fee, $10.

Journalism I. Reportorial and Editorial Course. *Mr. Kaltenborn.*

The topics of this course are:

(1) News sources, (2) interviewing, (3) preparing copy, (4) news values, (5) newspaper departments, (6) editorials, (7) criticism and reviews, (8) press agents, (9) the New York press, (10) the business office.

Two terms, two hours a week. Brooklyn Branch. Fee, $12 each term.

Journalism II. Current Events and New Analysis. *Mr. Kaltenborn.*

This course deals with all phases of current history treated by the daily press. The leading events of the week are summarized and explained, special attention being given to news of national and international importance. References are made to the leading topics of the day in the world of art, music, drama and literature. The written work of the course includes reports, criticisms and editorials on those topics in which the student is particularly interested. Some of the best examples of contemporary writing as well as the work of the students themselves are analyzed in the classroom.

Two terms, two hours a week. Brooklyn Branch. Fee, $12 each term.

Copy-Editing and Proof-Reading. *Mr. Levitas.*

The purpose of this course is to give the students a thorough training in the technical elements of the language.

It is intended especially for printers, proofreaders, editorial workers and writers.

Three hours a week. Main Building. Fee, $10.

Cost Estimating and Administration for Printing Shops.
Mr. Levitas.

This course is designed to acquaint the students with the methods and customs of the modern printing office. The various equipments and materials used in the printing product—type, presses, etc.—are thoroughly analyzed and their values ascertained.

The course goes into the elements of cost and how to find them. The cost of every phase of production and the value of each process is considered and estimated.

Two hours a week. Main Building. Fee, $7.50.

Typography and Advertising. *Mr. Levitas.*

The object of the course is to teach accurate typography. Consideration is given to the various elements which go to make up the display of commercial forms.

Two hours a week. Main Building. Fee, $7.50.

Business English, Special. *Messrs Keleher and Sobel.*

English grammar is systematically reviewed; and derivatives, synonyms, spelling, and idioms are studied. In composition attention is concentrated on sentence structure; and paragraph writing is developed.

Two hours a week. Commerce Building. Fee, $5.

Textiles (I). *Messrs. Arundale, Cox and Baruch.*

This is a general and comprehensive course in textiles for salesmen and other business men who handle textiles. It includes a study of cloth analysis, the various weaves, yarn manufacture, and various processes.

Ten weeks; two evenings a week. Commerce Building. Fee, $15.

Textiles (II). A. B. C. *Messrs. Arundale, Cox and Baruch.*

A. Silks.

The raw material is considered with its many peculiarities, together with methods of converting it into forms suitable for weaving. Importance and commercial value of silk (raw—spun—artificial). Construction of organzine, tram, and spun silk yarns. Identification, construction and characteristics of the staple silk fabrics. Yarn and cloth calculations. Analysis of samples for the purpose of determining the weave and kind of yarns used. Microscopic detection and examination of the fibers.

Twelve weeks; one evening a week. Commerce Building. Fee, $10.

B. Cotton.

Discussion and manufacture and spinning of cotton yarn. Yarn and cloth calculations. Bleaching, mercerizing, and dyeing of cotton yarns. Study of the construction and finishing of cotton fabrics:

weaves used; warp and filling patterns. Identification and characteristics of the staple cotton materials. Microscopic detection and examination of the fibers.

Twelve weeks; one evening a week. Commerce Building. Fee, $10.

C. Woolen and Worsteds.

Discussion of the processes common to woolen and worsted yarn manufacture. Uses of woolen and worsted yarns. Yarn and cloth calculations. Analysis of samples for the purpose of determining the weave and kind of yarns used. Finishing of woolen and worsted fabrics. Characteristics of the staple fabrics. Microscopic examination of the fibers.

Twelve weeks; one evening a week. Commerce Building. Fee, $10.

Elementary Photography. *Mr. Samuel Schwarz.*

This course which is principally intended for the amateur photographer, has for its aim the teaching of the most elementary principles of photography. It covers those salient features of the art which are so important for the production of good pictures.

The various methods of developing, printing and the after-treatment of the negative as well as the positive will be fully covered. Laboratory and dark-room work will be a feature of this course.

One evening a week. Commerce Building. Fee, $12.50.

Intermediate Photography. *Mr. Schwarz.*

In this course the more advanced stages of photography will be covered and discussed. The chemistry of photography, composition, pictorial photography, portraiture in the studio, out of doors as well as in the home, commercial photography, tinting, spotting, toning, mounting, enlarging, reducing and finishing, comprise some of the characteristic features of the course. Ample opportunity will be afforded each student to do field and dark-room work.

One evening a week. Commerce Building. Fee, $12.50.

Advanced Photography. *Mr. Schwarz.*

In this course the most advanced stages of photography are taken up, and its application in commercial as well as scientific and professional branches.

One evening a week. Commerce Building. Fee, $12.50.

SECRETARIAL COURSES

In the Evening Session

The intensive courses are open to those who are graduates of a high school or who have equivalent preparation. Those who are not graduates of high schools must give evidence of special fitness.

Instructors: *Rose Lichterman, Supervisor; Conrad J. Saphier, Herman J. Stich, John V. Walsh, and others.*

Intensive Elementary Stenography. (Pitman System and Gregg System.)

The first twelve weeks are devoted to an intensive study of the principles of the system and their application. Dictation is introduced from the beginning and continued throughout the study of the theory. The last four weeks are devoted to a review of the principles and to the development of speed in note-taking and in ability to read back notes.

Four hours a week. Main and Commerce Buildings. Fee, $20.

Intensive Course in Typewriting.

The touch method is taught. With a thorough knowledge of the keyboard a minimum speed of 30 to 40 words a minute should be obtained.

Four hours a week. Commerce Building. Fee, $20.

Advanced Course in Typewriting.

It is aimed to give speed drills so as to attain a speed of 50 or more words a minute, with practice in the various forms of special work.

Three hours a week. Commerce Building. Fee, $12.50.

Dictation (I). (Pitman System.)

For those who have completed the study of the theory. This is a beginners' dictation class. Dictation begins at 30 to 40 words a minute and aims at attaining a minimum rate of 70 words a minute for both business correspondence and straight matter.

Three hours a week. Main and Commerce Buildings. Fee, $12.50.

Advanced Dictation (II). (Pitman.)

Brief reviews of the principles of the system that make for speed in note-taking. Short cuts and speed devices. Dictation begins at 60 to 70 words a minute, and aims at attaining a rate of 100 words a minute.

Three hours a week. Main and Commerce Buildings. Fee, $12.50.

Speed Dictation (III). (Pitman.)

The dictation in this class begins at 90 to 100 words a minute and aims at attaining a rate of 120 to 130 words a minute. Reviews of the principles making for speed, as well as abbreviating and contracting devices, are assigned for study so that the time in class is devoted exclusively to dictation practice and outline formation study.

Three hours a week. Commerce Building. Fee, $12.50.

High Speed and Reporting—Public and Court. (Pitmanic.)

This course presumes on the part of the student a thorough grounding in shorthand principles and the ability to write at least

125 words a minutes. It aims to prepare for court reporting, for the C.S.R. degree examination, for the reporting of conventions, hearings, sermons, interviews, after-dinner speeches and general free-lance stenographic work.

The course is adapted to the needs of writers of any Pitmanic system, including Munson, Graham, Success, Ben Pitman and Isaac Pitman.

Three hours a week. Commerce Building. Fee, $15.

French Stenography.

An intensive course for students who have a knowledge of French and also understand the principles of Pitman Stenography.

Three hours a week. Commerce Building. Fee, $20.

Spanish Stenography.

Section A (Gregg).
Section B. (Pitman). *Mrs. Garza.*

These intensive courses require a knowledge of the language and the principles of stenography.

Three hours a week. Commerce Building. Fee, $20.

Bookkeeping and Office Practice. *Mr. Jason.*

A special course designed to prepare persons of average intelligence, in a short time, to quality for office bookkeeping positions under a head bookkeeper.

Two hours lecture and two hours conference a week for six weeks. Commerce Building. Fee, $5.

COMMERCIAL SUBJECTS OFFERED IN CONNECTION WITH THE SCHOOL OF EDUCATION.

Elementary Pitman Stenography.

Section A, *Mr. Walsh.*
Section B, *Mr. Saphier.*
Section C, *Mr. Frank.*

A complete study of the Isaac Pitman System of shorthand. The work is planned to give a full knowledge of the principles underlying the theory and considerable practice in their application.

Thirty hours, twenty weeks. Registration fee, $2.50.
Sec. A, Commerce Building.
Sec. B, Maxwell Training School.
Sec. C, Washington Irving High School.

Intermediate Pitman Stenography.

Section A, *Mr. Walsh.*
Section B, *Mr. Saphier.*

This course continues the aims of the elementary course. Emphasis is placed on the application of the theory of Pitman stenography and the reading and transcription of notes. Students who complete this

course ought to be able to write ordinary dictation at a rate of 60 to 75 words a minute.

Thirty hours, twenty weeks. Registration fee, $2.50; tuition, $5.
Sec. A. Commerce Building.
Sec. B. Maxwell Training School.

Advanced Pitman Stenography. { Section A, *Mr. Strumpf.* / Section B, *Mr. Saphier.*

This is a shorthand drill course for those who can write from 60 to 80 words per minute. The aim is to attain a speed of 100 words per minute together with shorthand scholarship.

Thirty hours, twenty weeks. Registration fee, $2.50; tuition, $5.
Sec. A. Commerce Building.
Sec. B. Maxwell Training School.

Elementary Gregg Stenography. { Section A, *Mr. Markett.* / Section B, *Mr. Cohen.*

All the theory and principles of Gregg Shorthand are studied intensively.

Thirty hours, twenty weeks.
Sec. A. Commerce Building. Registration fee, $2.50.
Sec. B. Commerce Building. Registration fee, $2.50; tuition, $5.

Intermediate Gregg Stenography. *Mr. Markett.*

This course is arranged for those who have completed the study of the manual or for those who have completed the first twelve lessons. The principles of the system are thoroughly reviewed, and graded dictation given for speed in execution and facility in application.

Thirty hours, twenty weeks. Commerce Building. Registration fee, $2.50; tuition, $5.

Advanced Gregg Stenography. *Mr. Markett.*

Dictation on simple business matter will begin at 60 or 70 words a minute and will aim at attaining a speed of 100 or more words a minute.

Thirty hours, twenty weeks. Commerce Building. Registration fee, $2.50; tuition, $5.

Methods of Teaching Pitman Stenography. { Section A, *Mr. Sugarman.* / Section B, *Mr. Saphier.*

This is a course for present and prospective teachers of Isaac Pitman Stenography. Brief talks endeavor to make clear the application of the principles of psychology to the teaching of the subject. Class members are required to prepare lesson plans on each "principle" and present them in class for discussion and criticism. This course, together with a thirty-hour course in Methods in Typewriting, fulfills certain eligibility requirements approved by the Board of Examiners.

Thirty hours, twenty weeks. Registration fee, $2.50; tuition, $5.
Sec. A. Main Building.
Sec. B. Maxwell Training School.

Methods of Teaching Gregg Shorthand. *Mr. Markett.*

This is a sixty-hour course given in two units.

The first thirty hours are devoted to lectures and to discussions of the sound principles of teaching and their practical application to the teaching of Gregg Shorthand. The second thirty hours are devoted to practical demonstration of the teaching of Gregg Shorthand under actual classroom conditions. The members of the class are required to prepare lesson plans on every lesson, and to present them before the class for discussion and criticism.

Thirty hours, twenty weeks. Commerce Building. Fee for each half: Registration, $2.50; tuition, $5.

Typewriting, Elementary. {Sections A, B, *Mr. Walsh.* Section C, *Mr. Saphier.*

A thorough knowledge of the keyboard is given, and a speed of 20 to 30 words a minute is developed. The course includes: study of the correct use of the typewriter; finger drills; exercises of words and sentences; letter forms; tabular work; typewriter parts and their functions.

Thirty hours, twenty weeks. Registration fee, $2.50; tuition, $5.
Sec. A. Commerce Building.
Sec. B. Washington Irving High School.
Sec. C. Public School 6, Brooklyn.

Typewriting, Intermediate and Advanced.

{Sections A, B, *Mr. Walsh.* Section C, *Mr. Saphier.*

This course aims to develop rapid and accurate typists who have a thorough knowledge of the various uses of the machine.

Thirty hours, twenty weeks. Registration fee, $2.50; tuition, $5.
Sec. A. Commerce Building.
Sec. B. Washington Irving High School.
Sec. C. Public School 6, Brooklyn.

Methods of Teaching Typewriting. *Mr. Saphier.*

This course is planned for teachers and prospective teachers of typewriting. It offers no opportunity for actual typewriting, but treats, through lectures and demonstrations, of the various means of developing habits of skill.

Thirty hours, twenty weeks. Public School 6, Brooklyn. Registration fee, $2.50; tuition, $5.

Methods of Teaching Office Practice. *Mr. Strumpf.*

This course considers the means of teaching office routine, *e. g.,* incoming and outgoing mail, use of office appliances, filing, indexing, etc. Opportunity is offered for actual use of these appliances. The class is limited to 40.

Thirty hours, twenty weeks. Washington Irving High School. Registration fee, $2.50; tuition, $5; materials, $1.

Typewriting Technique and Skill Development.
Mr. H. H. Smith.

This course is especially designed for teachers of typewriting and deals with technical details underlying technique and skill development in the art of typing. The experience of the typewriter companies in training the world's fastest typists furnishes a general background for the course. Ability to use the typewriter by touch is prerequisite.

Thirty hours, twenty weeks. Employment Room, 327 Broadway. Registration fee, $2.50.

Commercial Arithmetic: Method and Content. *Mr. S. W. Fox.*

This course aims to prepare teachers in approved methods of teaching commercial arithmetic. The courses of study for junior and senior high schools are used as a basis for the course. Demonstration lessons are given by the instructor.

Thirty hours, twenty weeks. Commerce Building. Registration fee, $2.50; tuition, $5.

Elementary and Intermediate Bookkeeping. *Mr. Greenstein.*

The aim of this course is to prepare teachers and prospective teachers of bookkeeping for the seventh and eighth years and the junior high school.

Thirty hours, twenty weeks. Washington Irving High School. Registration fee, $2.50; tuition, $5.

Advanced Bookkeeping and Preparatory Accounting.
Mr. Greenstein.

This course aims to prepare teachers of bookkeeping for the junior and senior high schools. The course includes fundamental principles in depreciation, reserves, reserve funds, manufacturing and cost accounting, investment accounting and auditing.

Thirty hours, twenty weeks. Washington Irving High School. Registration fee, $2.50; tuition, $5.

Business English. *Mr. Saphier.*

This course aims to give to students the application of the principles of English composition to business purposes. The following types of letters are considered: application, order, receipt, acknowledgment, claim, adjustment, recommendation, collection, sales, promotion, complaint, etc. Throughout the course ample opportunity for drill, writing and correction is provided.

Thirty hours, twenty weeks. Public School 6, Brooklyn. Registration fee, $2.50; tuition, $5.

COURSES FOR DISABLED SOLDIERS

CONDUCTED IN COOPERATION WITH THE REHABILITATION DIVISION OF THE FEDERAL BOARD FOR VOCATIONAL TRAINING

By arrangement with the Federal Board for Vocational Training, the College conducts practical courses in automobile mechanics, general mechanics, drafting, electrical work, building construction and photography. These courses carry with them no college credit, but they are designed to fit disabled soldiers for positions in industries.

The courses are given by the following members of the teaching staff:

Dean Robinson, Director.

Mr. Baum, Supervisor of Courses; Professors Skene and Autenrieth, Messrs. Louis Goodman, S. A. Schwarz, Spitzenberg, Troy, Fecher, Atticks, Arland, Thomas, J. H. Estabrooke, Russoff, Wolchonok, Henry, Brenner, Yaconetti, Pappas, Cook, A. L. Peterson, Buckley, Hanburger, Vanderbrook, Michels, Schnepel, Philipson, Glaze, Whitman, Lyman, Judge, Plock, Appleby, Eibsen, Costello, and Herrley, and Mrs. Stewart.

LITERARY COURSES

Mechanics of Composition.

A special intensive course of practical work in grammar, vocabulary, punctuation, sentence structure, paragraph writing, and letter writing. It is intended for persons otherwise qualified to pursue college studies who are handicapped by weakness in English composition, especially for those of foreign birth, those who have not gone through high school, and those who have been long out of school. In connection with the course there is opportunity for personal conferences with the instructor outside the class period.

Two hours a week. Main Building. Fee, $7.50.

Modern European Literature (Continental).

This course takes up the chief figures and the main currents of contemporary thought in Continental European literature. During the first term the lectures are on Russian and Scandinavian literatures. The foremost contemporary writers of Germany, France, Italy, and Spain are taken up for study in the second term. Readings are assigned, discussions held, and oral and written book reviews required.

Two terms, two hours a week. Main Building. Fee, $10 each term.

The Short Story. *Dr. Gaston.*

A study of the principles and structure of the short story, including motive, characterization, unity, plot, setting, dialogue, diction, emotional element and realism. Each student is expected to write a fortnightly story.

The aim of the course is both to produce stories that will sell, and to add an element of enjoyment to life through the use of leisure time in the pleasurable work of the imagination. Text-book: Albright's *The Short Story.*

Two terms, two hours a week. Brooklyn Branch. Fee, first term, $5; second term, $10.

Poetry Writing. *Dr. Lieberman.*

This course is intended primarily for writers and incidentally for all lovers of poetry. The aim of the course is to supply the student with a knowledge of the most approved current practice and to make him familiar with the best modern standards. Distinguished poets are invited to speak to the class on interesting phases of their work and to read from their own poems.

Two hours a week. Brooklyn Branch. Fee, $10.

The Correction of Foreign Accents.

This course is designed to help approved students eliminate the defects of a foreign accent and foreign intonation, and to aid them to acquire good articulation and pronunciation.

Two hours a week. Commerce Building. Fee, $6.

Elementary French.

In connection with the general administration of the Evening Session, the *Alliance Française de New York* offers three courses, one for beginners, a second year course and a third year course. The courses are designed to teach the student to understand and speak easy French and later impart some knowledge of French manners, customs and literature. Practical conversational methods are used throughout, yet the work is systematized and guided by regular text-book assignments and study. The three courses are so arranged that a student who contemplates further academic study of French as provided by advanced college courses should be able, if he completes these three, to enter college with credit for three years of French.

Course a. Three hours a week. Fee, $3.
Course b. Three hours a week. Fee, $5.
Course c. Three hours a week. Fee, $5.
Main and Commerce Buildings and Brooklyn Branch.

COURSES IN TECHNOLOGICAL SUBJECTS

Dental Bacteriology. *Prof. William Ward Browne.*

A course designed to lay before the student by means of lectures and laboratory exercises the technique of bacteriology, together with the more important facts concerning the structure and function of bacteria and the other micro-organisms. The first two-thirds of the term are devoted to the fundamentals of general bacteriology and the last third to the special application of bacteriology in the fields of dentistry and public health. The laboratory work of

the course is planned to correlate as closely as possible with the lectures, giving the student the opportunity of perfecting all the general principles of bacteriological technique, *i.e.,* the various methods of staining the bacteria, the preparation and sterilization of all the common culture media, the methods of isolation and identification of bacteria and the various methods of inoculation and incubation.

The work is so arranged as to enable practicing dentists to combine office work in the daytime with a study of the theoretical aspects of bacteriology by college attendance every Friday evening during the term of sixteen weeks.

Four hours a week. Main Buliding. Fee, $25.

Advanced Machine Tool Laboratory.

A course in advanced machine work consisting of graded exercises of an advanced nature on the lathe, milling machine, planer, grinding machine, etc., also forging, hardening and tempering of tools. Pyroscope and scleroscope tests and general shop practice requiring accuracy in the use of micrometrical measuring instruments.

Prerequisite: ME 230 or its equivalent. Six hours a week. Fee, $15.

AUTOMOBILE MECHANICS

Under the Direction of Dean Skene.

Automobile Course.

A practical and informational course on the construction, repair and operation of the gasoline automobile. Especially designed for owners, prospective owners, salesmen, garagemen, chauffeur-mechanics, and all others who desire to obtain a thorough knowledge of the automobile. Includes lectures, laboratory instruction and outdoor driving lessons.

Sixteen weeks, 88 hours. Main Buildings. Fee (including driving lessons), $50.

Advanced Automobile Course. Starting, Lighting and Ignition Systems.

Lectures and laboratory practice on standard automobile electrical systems; training in locating and remedying troubles.

Sixteen weeks, eighty hours. Main Building. Fee, $35.

BUILDING CONSTRUCTION

These courses are given by the staff of the Engineering Department of the College and experts from the field of building construction, under the general supervision of *Professor McLoughlin.*

Buildings 1—Materials of Building Construction.

Professor Skene.

In this course the student studies the characteristics, tests and inspection of all materials used in building construction. Each ma-

terial is studied from the time of manufacture to the purchase, inspection and placement in the building.

Two hours, one evening a week. Fee, $15.

Buildings 2—Plan Reading and Estimating.

Mr. Bernfeld and Mr. Marty.

A detailed study of building plans and their interpretation and methods of making estimates from them. Elementary commercial law governing contracts and specifications.

Six hours, two evenings a week. Fee, $25.

Buildings 3—Engineering Design. *Mr. Bernfeld.*

Assistants: Frank Boyle, E.E., Department of Electricity; William Dolan, Chief Plumbing Examiner; Patrick Foley, Chief Elevator Examiner, Bureau of Buildings, and Joseph Rahilly, M.E., Mechanical Equipment Division, Board of Education, City of New York.

A course devoted to the study of practical problems in engineering design, with lectures by experts in special branches.

Six hours, two evenings a week. Fee, $20.

Buildings 4—Architectural Engineering. *Mr. Bernfeld.*

This course is devoted to a study of the application of engineering principles to architectural problems.

Inspection trips to buildings under construction are arranged from time to time on Saturday afternoons, thus affording the class members an opportunity to become familiar with modern engineering practice.

Six hours, two evenings a week. Fee, $25.

Buildings 5—Advanced Architectural Engineering.

Mr. Bernfeld.

A continuation of the work of the preceding course, with numerous problems.

Six hours, two evenings a week. Fee, $25.

Buildings 6—Advanced Estimating and Specifications.

Mr. Bernfeld.

Frank Boyle, E.E.; John Rahilly, M.E.; Nicholas Marty, Chief Estimator; and others.

Complete detail estimates of all labor and materials entering into the construction of modern fireproof, non-fireproof and frame buildings. The work is arranged so that from the beginning each student uses complete sets of plans and specifications, exactly as in an up-to-date builder's office. Each particular class of work is in charge of a different instructor, who has specialized in it. Lectures, problems and discussions.

Six hours, two evenings a week. Fee, $25.

Buildings 7—Reinforced Concrete Design and Construction.

Mr. Goodman.

The purpose of this course is to give men engaged in the various

branches of building construction a thorough foundation in the principles of the design and construction of reinforced concrete structures. The application of these principles is demonstrated by actual design work.

Six hours, two evenings a week. Fee, $25.

MUNICIPAL CONSTRUCTION COURSES

1. Elementary Surveying.

Principles of surveying; construction and adjustments of surveying instruments. Methods used in laying out lines and turning angles, setting stakes for buildings, highways and streets, sewers, etc. Use of the level and various kinds of leveling. Setting grade stakes, computing excavation. Three hours a week are devoted to theoretical classroom work and two hours a week to field work on Saturday afternoons at Van Cortlandt Park.

Five hours a week. Main Building. Fee, $15. A deposit of $5 is required for instruments.

2. Advanced Surveying.

Studies in more exact processes of surveying. Topographical and hydrographical surveys, using the transit, level, plane, table, hand level, compass and taps. Triangulation surveying. Determination of latitude, longitude and meridian. Three hours a week are devoted to classroom work and two hours a week to field work at Van Cortlandt Park.

Five hours a week. Main Building. Fee, $15. A deposit of $5 is required for instruments.

3. Highways, Streets, Sewers and Sewage Disposal.

Types of roads and pavements; materials used. Preparation of subgrade, drainage and subsurface work. Dirt roads, macadam, granite, wood, asphalt and concrete roads. Maintenance methods. Design and construction of various types of sewers and disposal plants. Flow through pipes. House connections. Maintenance.

Four hours a week. Main Building. Fee, $20.

SPECIAL COURSES IN THE SCHOOL OF EDUCATION

Visual Instruction. *Mr. Crandall.*

This course consists of an analysis of the pedagogical principles underlying visual instruction, a review of its historical development, a survey of the materials now available, a study of the proper methods of its application to various subjects in the curriculum and an exemplification of the technique involved.

Thirty hours, thirty weeks. Main Building. Registration fee, $1.

Current History: Materials and Methods.

Dr. Bryan, in charge.

It is the purpose of this course to help teachers to use effectively

in the classroom the materials of current history. The course will consist of lectures on vital current topics by the regular lecturers in the "Trend of the Times" course, followed by analyses of these topics and studies in methods of teaching current events.

Thirty hours, thirty weeks. Commerce Building. Registration fee, $1.

School Gardening and Nature Study. *Dr. Kilpatrick.*

The continuation of a course begun in the spring of 1921. Auditors may register for the remainder of the course.

Thirty hours, twenty weeks. Commerce Building. Registration fee, $2.50.

The Teaching of Muscular Movement Penmanship. *Mr. Lister.*

The aim is to present a practical course in the pedagogy and practice of muscular movement penmanship. Modern methods of teaching muscular movement penmanship are discussed and demonstrated, and enough practice is provided to insure improvement in the penmanship of teachers.

Thirty hours, thirty weeks. Commerce Building. Registration fee, $2.50; tuition, $5.

Motion Picture Operation. *Mr. Domerhuizen.*

This course, designed for teachers in schools developing visual aids in instruction, emphasizes the theory and practice of motion picture operation. The equipment is complete. Opportunity is given to operate a machine in the presence of an audience. Proficiency is determined by the ability of the student to secure a license from the Board of Water Supply, Gas and Electricity.

Sixty hours, thirty weeks. Public School 41, Manhattan. Registration fee, $1.

Enforcement of Compulsory Education Laws. *Mr. Chatfield.*

This course includes study of the following topics: (1) The theoretical justification of compulsory education laws; (2) the fundamentals of compulsory attendance statutes; (3) the function of continuing school census; (4) the habit of regular attendance in relation to school work, administration, the teaching process and to juvenile delinquency; (5) details of the compulsory process; (6) the mechanics of control; (7) child labor laws; (8) continuation-school attendance; (9) regulation of street trades; (10) attendance officers and supervising attendance officers.

Thirty hours, twenty weeks. At 157 E. 67th Street. Registration fee, $2.50.

Oral English and Report Writing, II. *Mr. Schulz.*

The course is planned to aid the student to acquire ease and correctness in the use of English, both in speech and in writing. It

includes abundant practice in the delivery of short extemporaneous talks and in the composition of written reports.

Thirty hours, twenty weeks. Commerce Building. Registration fee, $2.50; tuition, $5.

Training for Girl Scout Leadership. *Miss Dabney.*

This course gives properly qualified persons, preferably New York City teachers, information that is needed for efficient leadership in the Girl Scout work. Among the topics studied are the history and purposes of the Girl Scout movement, programs and organization, health and psychology of adolescent girls, scout methods, and the teaching of nature study, first aid, home nursing and camp craft. Practical work forms an important part of the course.

Twenty hours, twenty weeks. Commerce Building. Registration fee, $2.50.

Review of American History and Government, with European Background. Method and Content. *Professor Mead.*

This course is planned especially for teachers and prospective teachers of American history in the upper grades and in the Junior High School. The lecture method is used mainly, together with illustrative material in the form of summaries and charts. Reports and collateral reading are required.

Sixty hours, thirty weeks. Commerce Building. Registration fee, $2.50; tuition, $10.

Review of American History with European Setting. Method and Content. *Mr. Giltner.*

This course concerns itself with the organization of the subject matter of American history. The problems of method are emphasized but made incidental to the treatment of content. Students must give evidence of having mastered a prescribed text in American history by Muzzey, Bassett or Fite, and in methods of teaching history.

Thirty hours, twenty weeks. Bryant High School. Registration fee, $2.50; tuition, $5.

BROOKLYN BRANCH

of the Evening Session

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L. LELAND LOCKE, A.M., *Instructor*

PHILOSOPHY

ERNEST N. HENDERSON, Ph.D., *Professor—(Adelphi College)*

PUBLIC SPEAKING

JACOB CLOYD TRESSLER, A.M., *Instructor*

ROMANCE LANGUAGES

JOSEPH L. PERRIER, Ph.D., *Instructor in Spanish*
HARVEY J. SWANN, Ph.D., *Instructor in French*
MONTEFIORE JUDELSOHN, A.B., *Instructor in French*

SPECIAL COURSES

HERBERT L. BRIDGMAN, M.A., *Adviser in Journalism*
H. V. KALTENBORN, A.B., *Lecturer in Journalism*
ELIAS LIEBERMAN, Ph.D., *Lecturer in Poetry Writing*
CHARLES ROBERT GASTON, Ph.D., *Instructor, The Short Story*

J. RIDLEY PARKER, *Librarian*
HENRY T. ALDEN, *Recorder*

COURSES IN THE SEVERAL DEPARTMENTS

Offered in 1921-1922.

ECONOMICS

1.	Elements of Economics.	*Professor Fradenburgh*
2.	Evolution of Industry.	*Professor Fradenburgh*
12.	Resources and Industries of the United States.	*Professor Fradenburgh*
20.	Money and Banking.	*Professor Fradenburgh*
130.	Accounting, First Term.	*Messrs. Thompson, Byles, and Leete*
131.	Accounting, Second Term.	
230.	Accounting, Third Term.	
231.	Accounting, Fourth Term.	
232.	Elementary Cost Accounting.	
233.	Advanced Cost Accounting.	
190.	Business Law, First Term.	*Mr. Wisan*
191.	Business Law, Second Term.	*Mr. Wisan*

EDUCATION

11.	History of Culture and Education.	*Professor Park*
16.	Educational Psychology.	*Professor Park*
21.	Philosophy and Principles of Education.	*Professor Park*

ENGLISH

1-2.	Rhetoric	*Professor Hall and Mr. Clark*
3.	History of English Literature.	*Mr. Clark*
72.	Shakespeare's Comedies.	*Professor Krowl*
73.	Shakespeare's Tragedies.	*Professor Krowl*
27.	English and American Prose of the XIX Century.	*Professor Krowl*
30.	American Literature.	*Mr. Clark*

GERMAN

51.	Elementary.	*Professor Colwell*
53.	Second Year German.	*Professor Colwell*
14.	The Classical Period of German Literature.	
15.	German Literature Since Goethe's Death.	

GOVERNMENT AND SOCIOLOGY

1.	American Government and Citizenship.	*Professor Park*
5.	Elements of Sociology.	*Professor Park*

HISTORY

1.	Mediaeval and Modern to 1648.	*Professor Fradenburgh*
2.	European History, 1648-1870.	*Professor Fradenburgh*
3.	Contemporary European History.	*Professor Schutz*
34.	Contemporary American Problems.	*Professor Schutz*

LATIN

71-72.	Vergil.	*Professor Mooney*

73. Cicero or Livy, and Satires of Horace — *Professor Mooney*
74. Horace; Lyric Poetry and Epistles.
75. Supplementary Course. — *Professor Mooney.*

MATHEMATICS

1. Solid Geometry — *Mr. Locke*
2. Trigonometry. — *Mr. Locke*
3. Advanced Algebra. — *Mr. Locke*
74. Analytic Geometry and Calculus — *Professor Bowden*
75. Calculus. — *Professor Bowden*

PHILOSOPHY

1. Introduction to Philosophy. — *Professor Henderson.*
2. History of Philosophy; Ancient and Mediaeval. — *Professor Henderson*
3. History of Philosophy; Modern. — *Professor Henderson*
12. Logic and Scientific Method.
17. Social Philosophy.
5. General Psychology. — *Professor Henderson*

PUBLIC SPEAKING

1. Vocal Expression. — *Mr. Tressler*
2. Visible Expression. — *Mr. Tressler*
3. Prose Declamation. — *Mr. Tressler*
4. Poetry Declamation. — *Mr. Tressler*
5. Debate. — *Mr. Tressler*
7-8. Extemporaneous Speaking. — *Mr. Tressler*

ROMANCE LANGUAGES

French

1-2. Readings in Modern French.
3-4. The Seventeenth Century.
41-42. Elementary French.
43-44. Intermediate French.

Spanish

41-42. Elementary. — *Dr. Perrier*
43-44. Intermediate. — *Dr. Perrier*
1. Intermediate.

SPECIAL COURSES

Journalism 1: Reportorial and Editorial Course. — *Mr. Kaltenborn*
2: Current Events and News Analysis. — *Mr. Kaltenborn*
The Short Story (Two Terms). — *Dr. Gaston*
Poetry Writing. — *Dr. Lieberman*

THE PREPARATORY HIGH SCHOOL

Townsend Harris Hall

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Joseph Pearl, Ph.D.,	*Instructor*
Edgar Halliday, A.M.,	*Instructor*

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George M. Hayes, A.M.,	*Supervisor*
Alexis Eugene Senftner, Ph.D.,	*Instructor*

[1]Absent on leave.
[2]Instructor in German.
[3]Instructor in Greek.

[1]Richard O. Heynich, Dipl.,	*Instructor*
Camille A. Toussaint, A.M.,	*Instructor*
Samuel A. Schwarz, A.M., C.E.,	*Instructor*
William Alexander Whyte, B.S.,	*Instructor*
Devereux Duer Robinson, M.E.,	*Instructor*
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Francesco Ettari, Ph.D.,	*Instructor*
Pierre J. Marique, Ph.D.,	*Instructor*
Francis L. Rougier, Ph.D.,	*Instructor*
Alfredo Elias, Lic. en Dro.,	*Instructor*
Arthur Dickson, A.M.,	*Instructor*
Jean des Garennes, A.M., LL.M.,	*Instructor*
William Troyansky, A.B.,	*Assistant Instructor*
Elliot H. Polinger, A.B.,	*Tutor*
John Castro, Dipl.,	*Tutor*

Samuel Newman,	*Recorder*
William Ballantine Boyd, M.D.,	*Medical Examiner*
Louis F. Sanman, M.D.,	*Medical Examiner*
George G. Holz, D.D.S.,	*Dental Examiner*
Margaret B. James,	*Library Assistant*

COURSES OF STUDY

Townsend Harris Hall offers to New York boys graduated from elementary schools a preparatory high school curriculum for those who wish to qualify for admission to college, and especially for admission to the freshman class of the College of the City of New York.

The sum of the work required for the completion of the preparatory course is fifteen college entrance units.

Emphasis is placed upon the quality of the work and the capacity of the student. The individual schedule is determined by the record of the student from term to term. This flexible program, administered under close supervision, gives every student opportunity to prepare most economically for his college studies.

[1]Instructor in German.
[2]Absent on leave.

The total requirements of the Townsend Harris Hall courses are as follows:

ARTS

Subject.	Units.
English	3
Latin	3
French, German, Greek, Italian or Spanish	2
Mathematics	3
Physics	1
History	2
Drawing	½
Civics	½
Oral English	

SCIENCE

Subject.	Units.
English	3
French	3
German, Greek, Italian, Latin or Spanish	2
Mathematics	3
Physics	1
History	2
Drawing	½
Civics	½
Oral English	

The applicant for admission to Townsend Harris Hall should decide as early as possible for which degree he wishes to be a candidate in his college course. If he wishes to become a Bachelor of Arts (A.B.), he should begin with Latin as his first foreign language; otherwise with either Latin or French. Only Latin or French is given as a first language; any language may be chosen as the second language.

For the first half-year all students take English, mathematics, drawing, Latin or French, each five hours a week, and civics, two hours a week. Thereafter the number of subjects assigned depends upon the student's capacity. Advancement throughout the course is by subject, so that the satisfactory completion of each half-year's work in a subject is necessary for its continuation. An added subject may be taken at the beginning of any half-year when the student's record for the preceding half-year indicates that he can satisfactorily pursue the additional subject. The schedule of recitations is purposely arranged to permit the student to benefit by his proficiency, so that, if competent, he may complete the course in three years. Satisfactory completion of the course entitles the student to admission to the freshman class of the College without entrance examinations.

ART

T 1-2. Elementary Representation (and Design).

5 hours a week.

The first term is devoted to freehand drawing from simple geometrical solids and other objects, single and in groups, with application of the elementary principles of perspective. Particular stress is laid on construction and proportion. Simple principles of decorative design are studied and applied.

In the second term more advanced groups of objects and casts of ornamental forms are drawn and their light and shade are studied. Exercises in drawing from memory are given. Decorative design is continued with application to familiar forms.

T 3-4. Decorative Design or Mechanical Drawing.

3 hours a week.

In the first term color is used and applied to practical problems. Mechanical drawing is offered as an alternative; and if elected takes the place of freehand drawing and decorative design for both T 3 and T 4.

In the second term continuation of decorative design with use of color and application to practical domestic and commercial purposes.

ENGLISH

T 1. *5 hours a week.*

Three hours of the five are devoted to grammar, composition and oral English. Hitchcock's *Enlarged Practice Book* is used as a textbook. Themes are written and revised in the classroom. English grammar is systematically reviewed. Attention is given to the mechanics of enunciation, and to the formation of proper habits of speech. *Ivanhoe, Treasure Island, A Midsummer Night's Dream,* and *The Ancient Mariner* are read in class; and several books from a seleted list are read outside of the classroom.

T 2. *5 hours a week.*

The time is divided as in T 1, and the same textbook is used. In composition, attention is concentrated on sentence structure, with weekly theme-writing in the classroom. Drill in the mechanics of speech is continued, and oral expression is developed. The students read in class *Silas Marner, The Merchant of Venice,* Palmer's *Odyssey,* and a selection of American poetry. Supplementary reading is required as in the preceding term.

T 3. *4 hours a week.*

Two hours are devoted to rhetoric and two to literature. Part I. of Brooks and Hubbard's *Composition Rhetoric* is covered, with chief attention to the paragraph. Fortnightly themes are required; the study of grammar is continued; some time is devoted to synonyms; several extracts are memorized. Speech habits and oral expression receive especial attention. The study of literature includes *The Tale of Two Cities, The Deserted Village,* Gray's *Elegy,* Sheridan's *The Rivals,* and Helen Keller's *The Story of My Life,* as well as several volumes of supplementary reading.

T 4. *4 hours a week.*

The division of time is the same as in T 3. The principles of description, narration, exposition, and argumentation are presented on the basis of Part II. of Brooks and Hubbard's *Composition Rhetoric,* with weekly and fortnightly themes. Oral expression is emphasized. The students read four *Idylls of the King, Julius Caesar,* Lincoln, *Selections from Letters and Speeches,* and selected standard short

stories (about 250 pages). Extracts from these works are memorized. The work in supplementary reading is continued.

T 5-6. *4 hours a week.*

In this year a critical study is made of Burke's *Speech on Conciliation,* Macaulay's *Johnson,* Milton's *L'Allegro, Il Penseroso, Comus,* Shakespeare's *Macbeth,* Washington's *Farwell Address,* and Webster's *First Bunker Hill Oration,* with supplementary reading as before. Composition work is frequent. Grammar and rhetoric are reviewed. Important forms of oral discourse are studied by practice.

FRENCH

Prescribed six terms in the Science Course.

T 11. Elementary. *5 hours a week.*

Downer's *Frist Book in French,* through the thirty-first lesson.

T 12. Elementary. *5 hours a week.*

Downer's *First Book in French,* through the fifty-seventh lesson. François and Giroud's *Simple French.*

T 13. Elementary. *5 hours a week.*

Downer's *First Book in French,* completed. Lavisse's *Histoire de France.*

T 14. Elementary. *5 hours a week.*

Review in grammar. Daudet's *Neuf contes choisis,* Erckmann-Chatrian's *Madame Thérèse,* Marique and Gibson's *French Composition,* sight readings, Bouvet's *French Syntax and Composition.*

T 15. Intermediate. *4 hours a week.*

Review in grammar. Dumas' *Monte-Cristo,* Maupassant's *Contes choisis,* Bouvet's *French Syntax and Composition.*

T 16. Intermediate. *4 hours a week.*

Lesage's *Gil Blas,* Laurie's *Mémoires d'un Collégien,* Marique and Gilson's *French Composition.* Letter writing. Bouvet's *French Syntax and Composition.*

The following terms are prescribed in the Arts Course for those taking French as second language.

T 1. Elementary. *5 hours a week.*

Downer's *First Book in French* through the fortieth lesson.

T 2. Elementary. *5 hours a week.*

Downer's *First Book in French* through the sixty-fifth lesson. Labiche et Martin, *La poudre aux yeux.*

T 3. Elementary. *4 hours a week.*

Downer's *First Book in French,* completed, and review. Daudet's *Neuf contes choisis* and Erckmann-Chatrian's *Madame Thérèse.*

T 4. Intermediate. *4 hours a week.*

Review in grammar. Composition, letter writing. *Mérimée's Colomba.* Roux's *Grammar and Composition.*

GERMAN

T 1. Elementary. *5 hours a week.*

Beginning German, by H. C. Bierwirth, through the seventeenth lesson.

T 2. Elementary. *5 hours a week.*

Beginning German, by H. C. Bierwirth, completed. Joynes's *German reader.*

T 3. Intermediate. *4 hours a week.*

Review in grammar. Reading of modern German texts; six poems are memorized.

T 4. Intermediate. *4 hours a week.*

Harris's *German Composition;* Gerstaecker's Germelshausen, Seidel's *Leberecht Huehnchen.*

GREEK

T 1-2. Elementary. *5 hours a week.*

Pronunciation, etymology, forms and syntax are studied simultaneously. Text-book: White's *First Greek Book.*

T 3-4. Xenophon. *4 hours a week.*

Translation with practice in forms, syntax, etymology and composition. Sight reading. Text-books: Goodwin's *Greek Grammar;* Goodwin and White's *Anabasis,* one book the first term and three the second; Pearson's *Greek Prose Composition.*

HISTORY

T 1-2. World History to 1789. *4 hours a week.*

A general survey of the development of world civilization coverering the period before the French Revolution. This course is designed to prepare students for the New York State Regents' examination in World History, Course A. Text book work is supplemented by collateral readings and reports on assigned topics.

T 3-4. American History and Civics. *4 hours a week.*

This course covers American history from the period of discovery and exploration down to the present. Social and economic developments are emphasized. During the second term the federal, state, and local governments are discussed. This course prepares for the Regents' Examination in Course C, Major Sequence. Text-books:

Muzzey, *American History;* Boynton, *Actual Government of New York.* Collateral readings and reports on assigned topics are required.

Civics 1-2. Community Civics. *2 hours a week.*

This course meets the requirements of the State Department of Education, and is intended for first-year students. The services of the community and of government in general and the obligations of citizenship are emphasized. Text-book: Hughes, *Community Civics.*

ITALIAN

T 1. Elementary. *5 hours a week.*

Arbib-Costa's *Italian lessons,* through the thirtieth lesson.

T 2. Elementary. *5 hours a week.*

Arbib-Costa's *Italian lessons,* through the fortieth lesson. Bowen's *Italian reader.*

T 3. Intermediate. *4 hours a week.*

Grandgent's *Italian Composition.* Manzoni *I promessi sposi,* by Geddes.

T 4. Intermediate. *4 hours a week.*

Goldini, *La locandiera.* Compositions. Wilkins' *Italian Literature.*

LATIN

T 1-2. Elementary. *5 hours a week.*

Grammar as prescribed for first-year students by the Regents' Syllabus. Practice in English-Latin and Latin-English exercises, including several pages of easy, connected Latin. Text-book: Collar and Daniell's *First Year Latin,* New York Edition, revised by Thornton Jenkins: lessons 1-41, the first term; lessons 42-80 the second.

T 3. Caesar. *5 hours a week.*

Caesar's *Gallic War,* Book 5, chaps. 1-12, 23-29, 50-54; Book II, chaps, 1-16. Ritchie's *Argonauts.* Grammar as prescribed by the Syllabus of the Regents, and vocabulary drills continued. Weekly exercises in Latin prose composition. Text-books: Kelsey's *Caesar's Commentaries,* new edition; New York Supplement to Kelsey's *Caesar's Commentaries;* Allen & Phillips, *Latin Composition,* Part I.

T 4. Caesar and Nepos. *5 hours a week.*

Caesar's *Gallic War, Book II,* chaps. 17-18; Book III, chaps. 13-16; Book IV, chaps. 20-38; Book V, chaps. 40-44, 48, 49, 52; Book VI, chaps. 9-23; Book VII, chaps. 1-10 and 63-71. Nepos' *Life of Hannibal.* Grammar reviewed, with a few additional principles of syntax. Vocabulary drills and weekly exercises in Latin prose composition continued. Text-books, the same as for T 3.

T 5. Cicero. *4 hours a week.*

The First and Third Orations against Catiline are read intensively. The Oration for Marcellus is read at sight. The principles of grammar are constantly reviewed. Weekly exercises in Latin prose composition. Text-books: D'Ooge's *Cicero's Orations;* Allen and Greenough's *Latin Grammar;* Allen and Phillips, *Latin Composition,* Parts II-III.

T 6. Cicero. *4 hours a week.*

The Orations for the Manilian Law and for Archias are read intensively. The Fourth Oration against Catiline is read at sight. The principles of grammar are constantly reviewed. Weekly exercises in Latin prose composition. Text-books, the same as for T 5.

MATHEMATICS

T 1. Elementary Algebra. *5 hours a week.*

The four fundamental operations for rational algebraic expressions, factoring, fractions, simple equations, both numerical and literal, containing one or more unknown quantities. Text-book: Hawkes, Luby and Touton's *Complete Algebra.*

T 2. Elementary Algebra. *5 hours a week.*

Involution, evolution, radicals, quadratic equations, both numerical and literal. Simple cases of equations with two or more unknown quantities that can be solved by the methods of simple or quadratic equations. Binomial theorem, having positive integral exponents and ratio and proportion. Text-book: Wells' *Essentials of Algebra.*

T 3. Plane Geometry. *4 hours a week.*

Text-book: Durell and Arnold, *Plane Geometry,* Books, I-III inclusive.

T 4. Plane Geometry. *4 hours a week.*

Text-book: Durell and Arnold, *Plane Geometry.* Complete five books.

T 5. Solid Geometry. *4 hours a week.*

Text-book: Durell, *Plane and Solid Geometry.*

T 6. Advanced Algebra. *4 hours a week.*

The theory of quadratic equations, graphs, ratio, proportion and variation, the progressions, logarithms, permutations and combinations, the binomial theorem, the theory of equations. Text-book: Fite's *College Algebra.* Regents' credit given for Intermediate as well as Advanced Algebra.

PHYSICS

Prescribed for two terms in both the Arts and Science Courses.

To the physical facts of home and outdoor life are added the experience of the physical laboratory. First-hand contact with matter, electricity and energy precede description and interpretation. Memory work is limited to names of things (definitions) and laws (constant relationships between measured quantities). The classical concepts are developed as experience needs them but not as final, rather as an approach to modern viewpoints. Mastery and understanding limit the field covered. Groups limited to twenty-four and thirty students. Each student is responsible for apparatus entrusted to him and must replace breakage.

T 1. Mechanics, Heat, and Magnetism. *4 hours a week.*

T 2. Sound, Light, and Electricity. *4 hours a week.*

PUBLIC SPEAKING

A—The Correction of Speech Defects. *1 hour a week.*

All the students entering Class A of Townsend Harris Hall must present themselves for examination in oral English. Those who are found to have any defect of speech will be assigned to take this course. The work will consist of exercises adapted to the individual difficulties of the student and designed to habituate him to enunciate correctly all the sounds of spoken English and to use them smoothly in continuous, idiomatic discourse.

The successful completion of this course, or exemption from it by examination, is a necessary entrance prerequisite for all the college courses in Public Speaking.

SPANISH

T 1. Elementary. *5 hours a week.*

Fuentes and François' *Spanish Grammar.*

T 2. Elementary. *5 hours a week.*

Fuentes and François' *Spanish Grammar, Trip to Latin America* and *Manual de Correspondencia.*

T 3. Elementary. *4 hours a week.*

Review of the grammar. Hill's *Spanish Tales;* Crawford's *Spanish Composition, Manual de Correspondencia.*

T 4. Elementary. *4 hours a week.*

Review of the grammar. Valde's La *Hermana Son Sulpicio;* Cool's *Spanish Composition;* Hills and Ford's *Spanish Grammar, Manual de Correspondencia.*

THE SUMMER SESSION

For more detailed information, see special bulletin.

The Summer Session, conducted in 1921, offered courses from the curricula of the College of Liberal Arts and Science, the School of Technology, the School of Business and Civic Administration, and the School of Education and also certain Secretarial and other special courses. The Session was for a period of eight weeks, one-half that of the usual college term. Recitations in the various subjects were conducted for twice the usual number of hours, so that at the end of the session credit was awarded for credit courses in the usual manner.

The courses offered were conducted during morning, afternoon and evening hours of every week day, including Saturday. The total enrolment was distributed as follows:

College of Liberal Arts and Science	1,064
School of Technology	22
School of Business and Civic Administration	325
Special Courses for Teachers	99
Secretarial Courses	101
Total	1,611

Organization.

The Summer Session of 1921 was conducted by a director and a staff drawn from (*a*) the College of Liberal Arts and Science, the School of Technology, the School of Business and Civic Administration, the School of Education, and (*b*) specialists from other institutions and the professions.

OFFICERS OF ADMINISTRATION AND INSTRUCTION

SIDNEY EDWARD MEZES, LL.D., *President*
PAUL KLAPPER, Ph.D., *Director of the Summer Session*

The College of Liberal Arts and Science.

ART

ALFRED N. APPLEBY,	*Special Instructor*

BIOLOGY

GEORGE G. SCOTT, Ph.D.,	*Associate Professor*
WILLIAM W. BROWNE, Ph.D.,	*Assistant Professor*
HERBERT RUCKES, M.A.,	*Instructor*
JOSEPH TULGAN, A.B.,	*Tutor*
ROBERT PATTERSON,	*Fellow*
HARRY FEINBERG, B.S.,	*Fellow*

CHEMISTRY

William L. Prager, Ph.D.,	*Associate Professor*
Louis J. Curtman, Ph.D.,	*Assistant Professor*
William L. Estabrooke, Ph.D.,	*Assistant Professor*
Roy R. Denslow, A.M.,	*Assistant Professor, Smith College*
Arthur Schutt,	*Instructor*
Joseph A. Babor, A.M.,	*Instructor*
David Hart, B.S.,	*Tutor*
Alexander Lehrman, B.S.,	*Special Tutor*
Moses Chertcoff, B.S.,	*Fellow*
Foster Dee Snell, B.S.,	*Fellow*
Alexander C. Glennie, A.B.,	*Fellow*

ECONOMICS

Lynn Mateer Saxton, Ph.D.,	*Assistant Professor*
Arthur E. Albrecht, A.M.,	*Instructor*
Morton Gottschall, A.B., J.D.,	*Instructor*
Thomas P. Kelly, A.M.,	*Instructor*
Harold Wisan, A.B.,	*Special Instructor*

CLASSICAL LANGUAGES AND LITERATURES

Carroll N. Brown, Ph.D.,	*Associate Professor*

EDUCATION

Egbert M. Turner, A.M.,	*Instructor*

ENGLISH

Bird Williams Stair, M.S.,	*Assistant Professor*
Thomas W. Parks, Ph.D.,	*Professor, Adelphi College*
John Valente, M.A.,	*Associate Professor, Univ. of Pittsburgh*
John L. Foley, M.A.,	*Special Instructor*

GEOLOGY

Bertram T. Butler, A.M.,	*Instructor*

GOVERNMENT AND SOCIOLOGY

Herman A. Gray, A.M.,	*Instructor*

HISTORY

Livingston R. Schuyler, Ph.D.,	*Associate Professor*
Homer C. Newton, Ph.D.,	*Associate Professor*
Howard C. Green, A.B.,	*Instructor*

HYGIENE

Robert A. Ambler,	*Tutor*

MATHEMATICS

Arthur B. Turner, Ph.D.,	*Assistant Professor*
George M. Hayes, A.M.,	*Instructor*
Samuel A. Schwarz, A.M., C.E.,	*Instructor*
George V. Brady, B.S.,	*Special Instructor*

PHYSICS

Benjamin A. Wooten, Ph.D.,	*Professor, Alabama Polytechnic Institute*
Roy F. Leighton, M.S.,	*Instructor*
Jerome Green, M.S.,	*Special Instructor*

PHILOSOPHY

John Pickett Turner, Ph.D.,	*Associate Professor*

PUBLIC SPEAKING

Erastus Palmer, A.M.,	*Professor*
Daniel W. Redmond, Ph.D.,	*Associate Professor*
Thomas E. Coulton, A.M.,	*Instructor*

ROMANCE LANGUAGES

Gaston A. Laffargue, B-ès-L.,	*Associate Professor*
Alfredo Elias, Lic. en Dro.,	*Instructor*

The School of Technology

Charles J. Pickett, Ph.D.,	*Principal, Vocational School for Boys*
	Supervisor, Courses in Forge and Pattern Making
Charles Lee Broas, B.C.E., M.S.,	*Special Instructor, Surveying*

The School of Business and Civic Administration

ACCOUNTANCY, ECONOMICS AND LAW

DeWitt C. Eggleston, M.E., C.P.A.,	*Assistant Professor, Accountancy*
A. M. Fox, C.E.,	*Instructor, Accountancy*
Simon J. Jason, M.A., LL.B.,	*Special Instructor, Accountancy*
William A. Patterson, A.M.,	*Special Instructor, Economics*
George Dariff, C.P.A.,	*Tutor, Accountancy*
Meyer J. Ostrow, C.P.A.,	*Tutor, Accountancy*
Alfred L. Hoffman, A.B., LL.B.,	*Tutor, Accountancy*
Moses Berenson, B.C.S., C.P.A.,	*Tutor, Accountancy*

FOREIGN LANGUAGES

Gaston A. Laffargue, B-ès-L.,	*Associate Professor*
Alfredo Elias, Lic. en Dro.,	*Instructor, Spanish*

ENGLISH AND PUBLIC SPEAKING

Thomas E. Coulton, A.M.,	*Instructor*
Arthur James Weston, M.A.,	*Assistant Professor, Stevens Institute*
Bernard Sobel, M.A.,	*Tutor, Business English*

The School of Education

I. David Cohen, A.B., LL.B., Pd.M.,
Principal, Brooklyn Continuation School.

Herman Gray, M.A.,
Instructor in History, Townsend Harris Hall.

Simon J. Jason, M.A., LL.B.,
First Assistant in Commercial Branches, New York City High Schools.

Abraham London, M.A.,
Principal, P. S. 36, Brooklyn.

Frederick B. Martin, D.O., Ph.D.,
Director, Speech Improvement, New York City Schools.

Maximilian Philip, Sc.D.,
Assistant Professor of Mathematics, College of the City of New York.

William E. Reed, M.A.,
Instructor in Civics, Manual Training High School.

Conrad J. Saphier, M.C.S.,
First Assistant, New York City High Schools.

Earl B. Slack, M.Sc.,
Chairman of Physical Science Department, Washington Irving High School.

Charles E. Springmeyer, M.A.,
Principal, P. S. 85, Brooklyn.

SECRETARIAL COURSES

CONRAD J. SAPHIER, M.C.S.,
Chairman, Department of Stenography, Bay Ridge High School. Special Instructor, Evening Session.

ROSE LICHTERMAN, A.B.,
Instructor of Stenography, New York City High Schools. Special Instructor, Evening Session.

LOUIS BRAND, B.A.,
Instructor, Stenography, New York City High Schools.

JOHN V. WALSH, B.A.,
Instructor, Stenography, New York City High Schools.

MARK I. MARKETT, B.A.,
Instructor in Gregg Stenography, High School of Commerce.

Officers of Administration

HOWARD C. GREEN, A.B.,	*Assistant to the Director*
HOMER C. NEWTON, Ph.D.,	*Librarian*
MORTON GOTTSCHALL, A.B., J.D.,	*Registrar in Dean's Office*
WALTER STALB,	*Bursar*
SAMUEL NEWMAN,	*Assistant to Registrar and Bursar*

COURSES GIVEN IN THE SUMMER SESSION

I. From the Curriculum of the College of Liberal Arts and Science.

ART

1-2. Descriptive Geometry.

BIOLOGY

1. General Biology.
23. Vertebrate Zoology.
26. Embryology.
32. Elements of Physiology.

CHEMISTRY

1-2. Descriptive Chemistry.
3. Qualitative Analysis.
4. Quantitative Analysis.
50. Organic Chemistry I.

CLASSICAL LANGUAGES

Latin 4. Horace.

ECONOMICS

1. Elements of Economics.
2. Evolution of Industry.
20. Money and Banking.

EDUCATION

11. The History of Culture and Education.
31. Principles of Education.
121. Educational Psychology.

ENGLISH LANGUAGE AND LITERATURE

1-2. Rhetoric.
3. The History of English Literature.
30. American Literature.
32. Contemporary Literature of the English-Speaking Peoples.

GEOLOGY

1. Elementary Geology.

GOVERNMENT AND SOCIOLOGY

1. American Government and Politics.
5. Elements of Sociology.

HISTORY

1. Medieval and Modern, to 1648.
2. Political History Since 1648.
3. Contemporary European History.

MATHEMATICS

1. Solid Geometry.
2. Trigonometry.
3. Advanced Algebra.
5. Calculus.
Trigonometry and Advanced Algebra.

PHILOSOPHY

1. Ethics.
5. General Psychology.

PHYSICS

1-2. Heat, Magnetism, Sound, Light, Electricity.
3. Mechanics, Wave Motion, Sound and Heat.
4. Magnetism, Electricity and Light.
5. Laboratory on Topics in Physics 3.
6. Laboratory on Topics in Physics 4.

PUBLIC SPEAKING

1-2. Principles of Expression.
3-4. Practice in Expression.
5. Debate (First Term).
6. Debate (Second Term).
7. Extemporaneous Speaking (First Term).
8. Extemporaneous Speaking (Second Term).

ROMANCE LANGUAGES

French 3. The Seventeenth Century.

II. From the School of Technology.

M.E.210. Forge and Foundry Laboratory.
M.E.220. Pattern Making.

C.E.102. Surveying (First Summer Camp).
C.E.203. Surveying (Second Summer Camp).

III. From the School of Business and Civic Administration

ECONOMICS

130-131. Accounting I: Theory, Practice, and Problems.
230. Accounting II: Theory, Practice, and Problems; Corporation Accounting.
232. Principles of Cost Accounting, Bookkeeping and Office Practice (Special Course).
233. Advanced Cost Accounting.
241. Public Utilities Accounting and Regulation.
221. Business Finance.
190. Introduction to Business Law—Contracts.

ENGLISH

201-202. Business English Composition.
Business English (Special Course).

FOREIGN LANGUAGES

French Elementary and Intermediate, First Term (Special Courses, in co-operation with the *Alliance Française*). Special Advanced Course.

IV. Special Courses for Teachers.

The History of Culture and Education.
Educational Psychology.
Methods and Principles of Teaching.
Method and Content in English in the Seventh, Eighth, and Ninth Years.
Method and Content of Geography and Science.
Methods of Teaching Stenography.
Bookkeeping and Elements of Accountancy.
Vocational Guidance, Placement and Follow-up.
Methods of Teaching Commercial Subjects.
Correction of Speech Defects, Theory and Clinic.

V. Secretarial Courses

Stenography, Elementary, Intermediate and Advanced, Pitman and Gregg Systems.
Intensive Elementary Stenography (Pitman).
Typewriting, Elementary and Advanced.
Methods of Teaching Typewriting and Office Practice.

COMMENCEMENT

THE AWARD OF PRIZES

JUNE 23, 1921.

The Pell Medals

To the students who rank highest in all the studies of the year:

Gold.....Harold Paul Seligson
Silver.....Edmund Burke, Jr.

The Ward Medals

For greatest proficiency in:

Chemistry.....Herbert J. Stark and Leonard Tarr
Natural Philosophy.....Joseph Meyer and George Edwin White
Biology.....Harry L. Greenstein
Economics.....Gustav Sokol
Government.....Liba Harold Studley
English.....Solomon Liptzin
Greek.....Archibald Marcus
Latin.....Isaiah Heller
French.....Isaiah Heller
Spanish.....Samuel Rosenblatt
German.....Samuel Rosenblatt
Oratory.....Edward Eliscu
Composition.....Max Newfield
Logic.....Benjamin Levine
History.....Benjamin Konowalow
Algebra and Geometry.....Alexander Mill and Isidore Rothman
Descriptive Geometry.....Martin Friedrich
Honorable Mention.....Edmund Burke, Jr.

The Riggs Medal

For the best English Prose Composition.....Benjamin H. Sellinger

The Kelly Prize

To the writer of the best critique in the two Literary Societies:

Bernard Hurwitz

The Claflin Medals

For proficiency in Latin:

Gold.....Leo Dressler
Silver.....Eugene Haas

The Ketchum Prizes

For proficiency in Economics:

First.....Clifford Anderson
Second.....Lawrence Bobker

The Roemer Prize

For the best poetry declamation:

Benedict Stambler (Fall) and Adolph Glassgold (Spring)

The Bennett Prize

For the best essay on a subject of American governmental policy:

Simon Pokart

The Ralph Weinberg Memorial Prize

For the best English Poem.....Alvin Bruch

The Prager Memorial Prize

To the seniors receiving the highest aggregate mark in their studies for the year....Harold Paul Seligson (February) and Leo Dressler (June)

The General Tremain Prize

For the best essay on the theme "Causes, Conduct, and Conclusion of the Great Civil War in the United States".....Oscar I. Janowsky

The James R. Steers Prize

For excellence in the Department of Art:
Adolph Glassgold and Kenneth N. Nunes

The Prize of the Board of Trustees

For the best Oration:
Francis E. Corbie (Fall) and Edward Montraville Swift (Spring)

The Freiberg Memorial Prize

For the second best Oration:
Samuel Rosenblatt (Fall) and Benedict Stambler (Spring)

The Meyer Cohn Memorial Prize

For the best English Essay by a member of the graduating class:
William Needles

The Divinsky Memorial Prize

For the highest Standing in Public Speaking throughout the College course.....Harold Paul Seligson

The Eliza Ford Memorial Prize

To the most deserving student in the School of Technology:
Samuel Julian Fuchs

SECOND YEAR HONORS

Highest Honors

For having attained by the close of the second year, the grade A in courses counting at least 50 credits, with the remaining grades B:

George Edwin White

Honors

For having attained by the close of the second year, the grades A and B in prescribed courses counting at least 55 credits:

Bobker, Lawrence	**Rifkin, Samuel**	Smith, James B.
Amron, Max	Ferrara, Joseph D.	Nagel, Ernest
Angrist, Alfred	Hoffberg, William	Preisman, Louis
Barkan, Samuel	Linder, Meyer	Scheuer, Alfred L.
Berman, Meyer S.	Meyer, Joseph	Shendowitz, Alexander

GRADUATION HONORS

Magna cum laude

For having received grade A in courses counting at least 64 credits, with the remaining grades all B:

Samuel Rosenblatt

Cum laude

For having received the grades A and B in courses counting at least 120 credits:

Birnbaum, George
Dressler, Leo
Heller, Isaiah
Horowitz, Nathan
Liptzin, Solomon
Needles, William
Papae, Norman
Sophian, Lawrence Henry
Tanner, Louis
Wolfson, Henry M.

DEGREES AND DIPLOMAS CONFERRED

From the College of Liberal Arts and Science:

Bachelor of Arts

Blom, Carl Alfred
Gluckstein, Ira I.
Krassner, Peter
Stewart, David Rankin

Bloch, Emanuel H.
Edelstein, Harry
Grossman, Bernard A.
Katzen, Joseph
Kessock, Hyman
Trynin, Aaron Hyman

Adelson, Isidore
Blum, Irving
Curzan, Lee
Eiten, Irving J.
Ewen, Frederic
Folman, Leon N.
Ger, William
Ginsberg, Leon
Gottlieb, Philip
Hirschtritt, Isidore
Horn, Joseph A.
Katz, Abraham M.
Katz, Alexander G.
Krinsky, Nathan
Kronfeld, Herbert E.
Lazer, Abraham
Liptzin, Solomon
Maltz, Jack I.
Miller, Henry
Morell, Barry
Movshovich, Henry
Needles, William
Palestine, Ira J.
Ragué, Harold S.
Redner, Henry L.
Rose, Morris M.
Rosenthal, Louis
Rudinsky, Samuel
Sainer, Abraham L.
Seif, Hyman
Steinberg, Samuel
Streicher, Samuel
Weisbord, Albert

Broder, Israel
Cohen, Emanuel
De Rosa, John
Dressler, Leo
Finkelstein, Herman N.
Gamarnick, Jacob
Garratt-Phayme, T. A.
Heller, Isaiah
Hirsch, Hyman E.
Hurwitz, Bernard
Lamm, Stanley Samuel
Lapan, Isidore
Leffert, Henry
Lepowsky, Raphael
Liebreich, Leon
Merkelson, Julius
Miller, Jasper
Naparsteck, Harry
Nathan, John Bertram
Papae, Norman
Rosenblatt, Samuel
Sabato, Frank
Safferson, Louis S.
Sellinger, Benjamin H.
Shimberg, Ira
Sophian, Lawrence Henry
Spector, Samuel
Stein, Samuel H.
Strongman, Henry Russell
Ulmar, David

Bachelor of Science

Appleby, Alfred Noel
Ashworth, Irving F.
Bandes, Michael
Berman, Joseph
Gurchot, Abel Charles
Suda, Charles
Zagat, Arthur Leo

Birnbaum, Allan M.
Diamond, Joseph L.
Eisenstat, Samuel A.
Feinberg, Harry
Feldman, Frederic
Freeman, Samuel R.
Goldberg, Henry J.
Goldin, Harry
Lesnick, Harry J.
Nach, Joseph
Polakoff, Barnett Paul
Rosenfeld, Hyman
Rubin, Walter
Shapiro, Morris
Weinreb, Samuel M.
Weinstein, Samuel

Brode, James I.
Bruckner, Robert E.
Byck, Louis
Carlin, Benjamin
Cohen, Hyman
Cooperstein, Hyman H.
Davidow, Henry S.
Epstein, Harry N.
Franzblau, Abraham N.
Gehan, Raymond F.
Ginsburg, Abraham M.
Goldberg, Abraham I.
Goldstein, Leo L.
Hanfling, Harry
Held, Murray
Hollander, Irving
Jacobi, Mendel
Klein, Alexander
Klein, Henry
Kwass, Albert A.
Levien, Abraham M.
Lucek, Charles Wm.
Levin, Ned
Lyss, Jacob P.
Mulready, Eugene L. T.
Pabst, William
Plock, Henry John
Resnikoff, Louis
Samet, Jerome
Schneider, Harry
Siegel, Abraham
Solomon, Julius
Tanner, Louis
Thuor, Louis
Trinin, Samuel
Turetsky, Morris
Wolinsky, Moses
Zemansky, Mark Waldo

Appold, George Dewey
Aronsohn, Morton H.
Atkin, Harry
Baer, Herbert L.
Bander, Morris
Barnett, Israel
Berger, Tobias
Berlage, Irvington R.
Birnbaum, George
Bischof, Gustave J.
Blay, Leon J.
Borodkin, Abraham
Burg, Harold
Camnitz, David
Castagnaro, Dominick
Cohen, Samuel
Dlugatz, Herman G.
Donargo, Anthony J.
Ehrlich, Jefferson
Eisenberg, David
Fialkoff, Abraham I.
Finkel, Abraham M.
Fischl, Arthur A.
Fourman, Victor
Friedheim, Louis H.
Friedman, David D.
Friedman, David H.
Goldberg, Barnet
Goldsmith, Benjamin
Goldstein, David S.
Goolker, Peisach
Greenstein, Harry L.
Grouf, Meyer
Heberlein, Arthur A.
Hecht, Nathan H.
Holzsager, Theodore G.
Horowitz, Nathan
Huber, Samuel S.
Hyman, Samuel W.
Jacobs, Edward
Jonas, Jerome
Katz, Isidore
Katz, Solomon
Keshen, Max R.
Kisver, Harry
Kunz, William W.
Lehrman, Leo
Leibowitz, William
Levine, Isidore
Levinson, David
Lichtenstern, Arthur W.
Littenberg, Moses S.
Loccisano, James
Marcou, Milton
Mattikow, Morris
McCracken, Wilfred H.
Mond, Morris
Murray, Frank A.
Newman, Irving A.
Pincus, Leonard J.
Popkin, Maurice Herman
Sang, Louis
Sargoy, Edward
Schapiro, Isidore
Scheinker, David
Schenkman, Harry
Schwartz, David Leo
Schwartz, Joshua
Seigerman, Morris
Seligman, Harry
Sherman, Leo Daniel
Sicular, Henry
Siebert, Julius Louis
Skach, Herbert Spencer
Smith, Bernard
Solomon, Isidore
Stander, Philip
Stark, Herbert J.
Sussman, Henry
Swift, Edward M.
Tarr, Leonard
Titone, Vito
Ullman, John
Vavoudis, Nicholas John
Wahrhaftig, Jacob
Weintrob, Morris
Weiss, Theodore Francis
Whiteman, Neville C.
Wilkes, Barnett
Wolfsohn, Ira S.
Wolfson, Henry M.
Yaswen, Joseph

Bachelor of Science in Social Science

Abramowitz, Nathan
Brophy, Daniel Francis
Farrell, Stanley W.
Seidenstein, Jacob

Boetticher, Curt Z. von
Cohen, Abraham DeWitt
Gratzner, Raymond I.
Janowsky, Oscar I.
Kosloff, Samuel
Levine, Aaron Arthur
Needleman, Israel
Paiewsky, David
Patterson, Robert
Seligson, Harold Paul

Bublick, Emanuel
Cohen, Jacob M.
Coll, Harry Stephen
Eliscu, Edward
Ellenoff, Louis
Feigin, George M.
Grehan, Martin J.
Halpern, Meyer
Hamburger, Gustave
Horowitz, Arthur
Inselbuch, Simon
Jacoby, Hyman

Jacobs, Julius M.
Kruth, Neils V.
Lanchner, Abraham J.
Lebowsky, Abraham
Lewit, James
Lublin, Isador
Maroulis, Anthony
Nunes, Kenneth N.
Orloff, George A.
Pokart, Simon
Schectman, Saul
Siegel, Samuel
Studley, Liba Harold
Yaffe, Louis P.
Zimmerman, Kurt A .

From the School of Technology:

Civil Engineer

Donargo, Anthony J.
Wren, William P., B.S.

From the School of Business and Civic Administration:

Diploma of Graduate in Accountancy

Bender, Albert
Bloomgarden, Celia
Blumenkranz, David H.
Botwin, Nathan J.
Cohen, Harry M.
Coleman, Lucius H.
Davis, Solomon
Eisner, Harry
Eliot, Solomon O.
Faber, Nathan Louis
Farbman, Samuel
Fischer, David Samuel
Gaudiosi, Pasquale
Goldman, Mary
Goldman, David
Goulfine, Louis
Greenberg, Harry L.
Grill, Max
Heller, Deborah
Horowitz, Jack
Kanarvogel, Louis
Klein, Tobias
Lebofsky, Harry B.
Leeman, S. J.
Leibovitz, Louis
Levine, Bernard H.
Maida, Josephine
McGuire, James F.
Nelson, Max
Offerbeng, Benjamin
Perlman, Nathan
Raisman, Israel
Renitz, Jerome
Reitmeister, Morris G.
Scherago, Jacob
Schnee, Abraham A.
Schron, Morris
Seelig, Michael
Shapiro, Charles H.
Skal, Raphael J.
Sidelle, Hyman
Smolowitz, Ethel
Spector, Julius
Stark, Abraham Bernard
Stuckelman, Max
Weisel, Samuel
Weissinger, Esther
Willner, Julius H.
Young, Isha

Bachelor of Business Administration

Warmflash, Joseph

Master of Business Administration

Cohen, Harry L., B.A.
Weiss, Abraham, B.A.

ENROLMENT

For the Term Ending in February 1922

STUDENTS IN THE DAY SESSION

College of Liberal Arts and Science

A=Arts. *S*=Science. *SS*=Social Science.

UPPER SENIOR CLASS

SS Algase, Benjamin
A Alper, Isidore
A Astrowitz, Jacob M.
SS Bobker, Lawrence
SS Brin, Saul
A Brown, Isaac
A Bruch, Alvin
S Chasnoff, Julius
A Chernow, David L.
S Chernuchin, Robert
A Corso, Joseph H.
S Crownfield, F. R.
S Dargo, Nathan
SS Drescher, Henry
S Finkelstein, Israel
S Fischer, Wm. Allen
SS Fishlowitz, Benjamin
S Fliedner, Leonard V.
S Fogelman, Hyman
S Franchina, Benedict
SS Franzblau, Abraham
A Giannattasio, Jos. M.
SS Grande, Isidor
SS Greenberg, Morris
A Greenberg, Simon
S Griswold, Frederick
S Gross, Alex
SS Hartman, Sidney
A Heller, Solomon
S Himelfarb, Morris
S Honan, Charles J.
A Hornestay, Abraham
S Horowitz, Moses
A Jacobs, Melville
S Kalkut, Adolph
S Kammins, Herman
S Konowalow, Benj.
A Kramer, Daniel
S Kronish, Abraham
S Lederman, Joseph
S Leiter, David
S Levine, Isidor
SS Levine, Nathan
A Levitch, Julius D.
A Linder, Meyer
S Mattikow, Bernard
S Maynard, A. De L.
S McTague, L. J.
S Michaelis, W. H. A.
A Newfield, Max
A Oberman, Hyman
SS Oseas, Israel
S Pick, Theodore
A Pfeffer, Herman
S Proshansky, Max
SS Rabkin, Louis G.
A Redding, Arthur F.
S Rifkin, Sam
SS Rifkind, Simon H.
A Scheinman, Bernard
A Schwartz, Louis
A Segal, Judah
S Semat, Henry
S Silverman, Samuel
A Simpson, Leonard P.
S Siskind, William
SS Smith, Alonzo De G.
SS Smith, Harold E.
S Sobel, Isidore
S Sokoloff, Peter
A Stahl, Benjamin
SS Waissar, Irving
A Weintraub, Meyer
SS Weisberg, Barney
A Wells, John A.
S Wendroff, Nathan
S Wesler, Abraham
SS Wisan, Joseph E.
S Young, Martin
S Zimmerman, Harry
S Zohman, Isidor

LOWER SENIOR CLASS

S Amron, Max
A Anderson, Clifford
S Angrist, Alfred
S Anzelewitz, Abraham
SS Attinson, David Jos.
SS Baron, Melvin
S Basson, Richard
A Begg, Roy
A Berger, Israel
S Berman, Meyer S.
S Bonadio, Colagero J.
S Brooks, Morris J.
S Broudy, David
S Bursky, Abraham S.
A Burston, William
A Carlin, Frank W.
A Cedarbaum, David
S Cinamon, Lionel
A Cohen, Barnet
S Cohen, Maurice S.
SS Craig, Robert T.
S De Phillips, Nunzio A.
S Diamond, H. Elias
A Dotzler, Louis C.
SS Edelstein, David
S Einhorn, Aaron W.
A Epstein, Isidore
S Fagin, Paul
SS Fanning, Joseph M.
SS Feinberg, Horace B.
S Fine, Irving
SS Fliegel, Jonah
A Flynn, James E.
A Flynn, Sylvester
S Forshleiser, Charles
A Fortgang, William H.
S Garofalo, Michael
A Gendell, Louis
SS Gerber, David
S Gilbert, Reuben
S Glassgold, Adolph
SS Goldberg, Chas. F.
S Golder, Herbert Lee
S Goodman, Maxwell
A Granowitz, Jacob
S Greenberger, Morris
S Helpern, Milton
S Herskowitz, Isidor
S Hoffman, A. L., Jr.

A Howell, Chas. C. G.
S Jacobson, Samuel J.
A Jacobson, Sheldon A.
SS Jackson, William H.
S Kaiser, Harry
S Katz, Herman
S Kelly, Robert E.
A Kennedy, M. P. G.
SS Landau, Max
S Lebowitz, Samuel H.
S Lefkowitz, Mortimer
S Levein, Chas. D.
A Levine, Alexander M.
A Levine, Benjamin
A Levinson, Isador
SS Levy, A. Morris
S Malcy, Louis
S Mandel, Isidor
S Mendelson, Emanuel
SS Menkes, Harry
S Menkin, Valy
S Michaels, Michael
S Milchman, Jack
S Miletsky, Morris
SS Milutinovich, J.
A Mins, Henry F., Jr.
A Mostow, Hyman
S Nathanson, Max B.
S Nyer, Edward
S O'Neil, Thos. J. W.
SS Oremland, Irving
SS Ottenstein, Solomon
S Pepper, Sidney
A Plevy, Abraham V.
A Rabinovitch, S. M.
A Ratner, Joseph
S Reich, Samuel B.
S Reis, Sylvan
SS Resnikoff, Eli
SS Robbins, Samuel
S Rosenberg, Alexander
S Rothberg, Abr. S.
SS Sackin, Louis H.
S Savitsky, Nathan
S Schechter, Joseph
S Schoelt, Abraham H.
SS Schonbrun, Henry
SS Schreiber, George
S Schults, George
S Seltzer, Max
SS Selzer, Louis
S Shendowitz, Alex.
S Sherman, Murray
A Shmunis, Abram N.
S Sigal, Wm. H.
S Silverman, Samuel
A Simons, Mortimer
A Smith, James B.
S Thompson, Michael
A Turner, Bernard
A Tynes, Harcourt A.
A Usdansky, Abraham
SS Vishab, Dicran
S Volodarsky, David
SS Wagner, Max
SS Warsoff, Louis A.
S Washeim, Henry, Jr.
A Weisman, Samuel A.
SS Wittner, Abraham
S Zitner, Benjamin
SS Zorn, Lewis E.

UPPER JUNIOR CLASS

SS Achinstein, Asher
S Albin, Joseph
S Andujar, Alphonse
A Annable, H. Dwight
A Anzalone, A. Thomas
S Apfelbaum, Percy M.
S Aronowitz, Isadore
SS Avrutis, William J.
S Barkan, Samuel
S Barry, Lyman F.
SS Becker, David S.
S Beinhart, Samuel
S Berman, Joseph
S Bernstein, Irving
SS Berson, Israel
S Bien, Adolph F.
S Biondo, Thomas
S Birnbaum, Silas J.
S Bronstein, Irving
S Brounoff, George
A Brownstein, Morris B.
S Carvajal, Jose A.
S Chabon, Irving
SS Chyat, Rubin
S Cohen, Clarence
S Cohen, Irving F.
S Corriero, William
S Cuba, Moses
A D'Agostino, Vito
SS Deutsch, Arthur
S Diamond, Arthur
A Dinin, Samuel
SS Ditolla, Alfred C.
S Dolowitz, Nathan
A Edelstein, Eman. M.
S Edelstein, Isadore L.
SS Efron, Jacob
S Ehlin, Isidor
S Ehret, Wm. F.
S Fass, Moses M.
S Ferrara, Jos. D .
S Filler, William
SS Fishbein, Abraham
SS Fluegelman, D. B.
A Friedman, L. A., Jr.
SS Friedman, Nathan
S Furman, Matthew
S Gellar, Abraham
S Gertler, Samuel I.
S Geshwind, M. H.
S Gialias, George
A Glassman, Michael
S Glicksberg, Chas. I.
S Goldberg, Harry
S Goldschlager, A. I.
S Goldstein, Louis
S Goldstein, Samuel
A Green, Louis
A Greene, Nathan
S Greene, Wm.
SS Gross, Frank
S Gross, Harry
A Haas, Alfred P.
SS Harkavy, Eman. E.
S Haut, Arthur
S Helfond, David M.
S Hoffberg, Wm.
S Horowitz, Jacob L.
S Iscol, George
S Jacobs, Barnett
S Jampel, John
S Jampolsky, Isaac
A Jerenberg, Jacob
S Joffe, Julian A.
S Jones, Frank J.
S Kalafowitz, Abr.
S Kalb, Joseph
S Kivowitz, Morris
A Kneital, Herman
SS Kraus, Michael
SS Leiserowitz, Nathan
S Levin, Morris
S Levy, William T.
S Lieberman, Hyman
S Lilling, Marcus
SS Lubetsky, Isaac
S Margolin, Samuel
A Martin, Christ. W.
S Matlofsky, Harry
S Meyer, Wm.
S Michaels, Isidore
S Mindel, Louis
SS Mollin, Simon
S Mondzak, Morris
SS Nagel, Ernest
A Nagelberg, Moses
S Nelson, Louis S.
A Nicastri, Daniel
S Parisi, Francis G.
S Parmet, Meyer
S Pedro, George F.
A Perlmutter, Bernard
S Pfister, Alexander

S Phimister, Charles
S Pick, Theodore
S Preisman, Louis
A Rappaport, A. D.
SS Raskin, Harry A.
SS Raskin, Jacob
S Raskin, Morris
S Rasmussen, Wm.
A Reich, Edward
S Roseman, Morris
S Rosen, Samuel
A Ruffman, Morris
S Russo, Sal V. H.
S Schatanoff, Louis
S Schein, Gabriel
A Scheuer, Lewis A.
S Schoen, Leo
S Scholder, B. M.
S Sessler, David
SS Shalvey, Sylvester J.
S Sheftman, Morris
S Sheinin, Benjamin
S Shrinsky, Max H.
S Silver, Morris
A Silverman, Jacob
S Siskind, Leo
A Slevin, Alfred
SS Soloff, Max
S Spivak, Benjamin
S Sternberg, Harry
S Tumen, Abraham O.
S Valency, M. J.
S Vesell, Moe
S Weil, Alfred
S Weiner, Irving P.
S Weinstein, H. L.
S Weintraub, Saml. H.
SS Weiser, Fred
S White, G. Edwin
S Wolcott, John R.
SS Wolff, Walter H.
A Wolfe, Sidney S.

LOWER JUNIOR CLASS

SS Abramson, Marcus
S Abruzzo, Joseph S.
S Acker, J. Theodore
S Amendola, Fred. H.
S Anker, Harry
A Atlas, Nicholas
S Axtell, Theodore
SS Ball, Harry
S Band, Charles V.
S Bauer, Arthur S.
S Bauer, John V.
S Benjamin, Bernard
S Beres, David
S Beris, Isidore
S Berliner, Harry M.
S Berman, Simon
S Bialostosky, Julius
S Blankfeld, Nathan
S Block, Leon
S Blom, Gusave M.
SS Bracco, Vincent
A Bragin, Moses
S Braunstein, M. L.
S Broggi, Arnold R.
S Connor, Jerome N.
S Craig, Robert L.
SS Curran, James A.
S Davidhoff, Morris
A Delany, Hubert T.
SS Delman, Isadore
S Denker, Peter
S Deutsch, Ralph
A Dickstein, Solomon
S Ebel, William J.
SS Eisenstein, Sigmund
S Eiserson, Leo
A Engelson, David
S Factor, David
SS Feingold, Maurice
S Feld, Harry
S Ferber, Louis
S Fix, William
SS Flamm, Julius
A Flynn, Raymond
S Forshner, Julius
S Foxe, Arthur N.
S Friedberg, Solomon
SS Friedman, Emanuel
SS Frost, Abraham
S Gade, Herbert
S Geller, Samuel
S Gewanter, Isidor
S Gibbons, Gerald A.
A Gilbert, William
SS Ginsburg, Lewis
SS Glantz, Edwin B.
S Goldat, William
A Gray, Wm. V.
S Greenberg, Abr. S.
S Gross, Bela
S Grossman, Benjamin
S Grossman, Howard
S Hahn, Morris
SS Harris, Harold
A Hauptman, Nathan
S Hayter, Bruce
A Heller, Nathan
A Henry, Thos.
S Herrman, Henry
S Hicks, Kenneth M.
S Hochberg, Lew A.
SS Hoffman, Harold
SS Hook, Sidney
A Horowitz, A. E.
S Horowitz, Philip
SS Hubbard, Raymond
S Interrante, Michael
A Ivans, Edwin
S Jacobs, Julius
S Japhe, Nathan. M.
SS Kahn, Gordon
A Kamenoff, Ralph J.
S Kameny, Samuel
S Kane, Douglas V.
S Kaplan, Daniel
A Katz, Bernard J.
A Katz, Solomon
A Kaufman, Charles
S Kaufman, Israel
S Kershner, Morris M.
SS Kirschstein, I. S.
SS Kline, Max
S Kolbe, Henry
S Kozminsky, Max
S Lascoff, Dudley
S Lato, Harold
S Leboff, Isidore W.
S Levine, Abraham
S Levine, Frank
S Levine, Milton I.
SS Levy, Daniel
A Levy, Herbert
SS Lewittes, Morris
SS Liddell, Emmons B.
A Lieberman, David
SS Lief, Harold
SS Linowitz, William
S Liptzin, David M.
S Loevenstein, Sam
SS Lovitz, Abraham
S Lubetsky, Benj.
SS Machelowitz, Sam
S Machlis, Meyer
SS Maltz, Meyer
S Matusow, Abraham
S McIndoe, Jas. E.
S McVeigh, Francis J.
A Mendelsohn, Jan
S Meyer, H. Harold
S Meyer, Joseph D.
S Meyer, Wm. Moses
S Milch, Eugene C.
S Miller, Frank H.
SS Miller, Harry
A Mortkofsky, Benj.
A Muecke, Berthold, Jr.
S Murray, Wm. Ed.
S Naddelman, Sidney
S O'Connell, Dan T.
SS Ohrberg, Wm. A.

SS Okun, Sidney
A Ornstein, Reuben
SS Penney, James G.
S Petix, Joseph
A Port, Morris
SS Polisuk, Morris
S Poselsky, Aaron
SS Prager, William W.
S Ringel, Wm. Ed.
S Rizzi, Charles
S Rochow, John B.
S Rosenwasser, H.
S Roth, Harry
S Rothberg, Moses
A Sakolsky, Hyman L.
A Salamone, Sylvester
S Salinger, Morris
SS Schaffer, Alex
S Schneider, David
S Schnell, Jos. J.
S Schnopper, Isidore
S Schwartz, Louis
S Schwartzberg, I. F.
S Schwimmer, Jos.
S Schwitzky, Louis
SS Schworm, Gustav B.
SS Seidel, Saml. B.
A Seon, Cornelius D.
S Serritella, M. M.
SS Shapiro, George
S Siegel, Louis I.
SS Slochower, Harry
S Solomon, Louis
S Steinberg, N. J.
A Sternberg, Wm. N.
SS Sternlicht, Bernard
SS Tannenbaum, Benj.
S Tanenbaum, Samuel
S Topkin, Isidore
S Trotsky, Barnet
S Waechter, Walter
S Wallach, Bernard
SS Weinberg, Geo. H
S Weingrow, Saml.
SS Weisberg, Abr. L.
S Williams, John L.
SS Zukernick, Isidore
S Zweifler, Isaac

UPPER SOPHOMORE CLASS

S Adler, Samuel
SS Alperin, Benjamin
S Altman, Herman
S Antell, Michael
S Antopolsky, Wm. A.
S Arbor, Benjamin
SS Aronson, Albert H.
SS Auerbach, Harry
S Barshay, Bernard
S Baskowitz, David N.
S Bein, Solomon
A Berger, Michael M.
A Berkowitz, Max
S Bernhardt, Abr.
S Block, Morris
S Blumstein, David
S Braude, Benjamin
A Brody, Leon A.
SS Cantor, Samuel
A Casey, Gordon M.
SS Chafetz, Asher
S Chaikelis, Alex. S.
SS Cohen, Harry
SS Cohen, Louis
A Cohen, Philip
S Denitto, Dominic
S Edelstein, Isidore
SS Elk, Abel
A Epstein, Abr.
S Epstein, Sydney
SS Etra, Max J.
SS Feibusch, Abraham
S Feigenbaum, Sam'l
S Fein, Louis
A Fine, Sidney A.
A Finkel, William
A Finkelstein, Benj.
S Flanzer, Joseph A.
S Fuentes, Robt. W.
A Fuld, Stanley H.
S Garber, Raphael
A Gerstenfeld, Asher
S Ginandes, George J.
S Goldman, Morris
A Goldman, Simon
S Goldstein, Abr. D.
S Goldstein, Louis J.
S Goldstein, Max S.
S Halberstein, Abr.
S Hamburger, Edward
SS Handler, Milton
S Helbig, Walter A.
S Herzog, Aaron
S Ingis, Isidore
S Jacobs, Albert
S Jacobs, Samuel
S Kahn, Arthur
S Kapell, William
S Kapler, Irving
S Keller, Ira
S Klauber, Leo
S Klieves, William
SS Kurz, Aaron
S Lactergiser, Abr.
S Lampner, Kalman
S Lassman, Samuel
S Levine, Samuel B.
S Levine, Samuel C.
S Levy, Irving J.
SS Lifschitz, Samuel
S Littlefield, Fredk. R.
S Loewenthal, M.
SS Louria, Emanuel
SS Mafaraci, Concetto
SS Mahler, Sidney
SS Maier, Milton L.
S Mandelbaum, Geo.
S Manfredo, Theo.
A Marcus, Archie
S Meirowitz, Herman
S Melamed, Samuel
S Merin, Joseph
S Milsner, Morton R.
S Morgenstern, David
S Morris, Emanuel W.
SS Muraskin, I. H.
S Murphy, Hugh L.
S Murphy, Wm. R.
S Nadell, Jack A.
S Novick, Joel
A Oppenheimer, M.
A Ozarow, Hyman
S Patent, Jacob
S Pearlstein, Jacob
S Prager, Benjamin
S Prensky, Solomon
SS Pruslin, William
S Rabinowitz, Louis
S Rippstein, John
S Rittenberg, Leonard
SS Rivlin, Harry N.
S Rogatz, Henry
S Rosenberg, Leon
S Rosenblum, Julius
S Rosenblum, Walter
S Rothman, John
S Rubenstein, Hyman
SS Salz, Frank
S Sass, Raymond W.
SS Savanuck, Alex
A Schaenen, Bernard
S Schmidt, Alois
SS Schwartz, Arthur
S Silverstein, Louis
S Silverstein, Maurice
SS Slachefsky, Frank
S Stein, William
S Steinberg, Joseph
S Sternin, Reuben
S Strassberg, Louis
S Tausend, Sidney
A Trilling, Louis R.
S Trivilino, Alfred
A Tulloh, Jos. A.
A Vogel, Herbert S.

S Vogel, Sidney
S Von Preysing, W.
SS Wallace, Jos. I.
SS Warren, Geo. J.
S Weiss, Max
S Witsky, Reuben
S Wiwak, Max S.
S Wolf, Norman
S Wolff, Robert I.
S Yager, Jacob
S Yancovitz, Jacob
S Zuckerman, Isaac

LOWER SOPHOMORE CLASS

S Aaronson, Benj.
S Adelman, Abraham
S Ansholowsky, Jos.
S Ashe, Julius
S Axell, Joseph
S Ayers, Joseph T.
S Baldwin, R. C.
S Baraff, Chas.
S Baumoehl, Abr.
S Bausch, Carl
S Bayer, Harold
A Begun, Isidore
S Belkin, Maurice W.
S Bergman, Murray
S Block, David
A Blum, Walter C.
A Bocchicchio, P.
A Borodovko, Isidore
SS Brodfeld, Hyman
S Broones, Martin J.
S Brownstein, Jacob
S Burke, Edmund
S Cagney, Edward
S Carlisle, Richard
S Cart, Harry
SS Chadabe, S. M.
S Chomsky, Joseph
S Cohen, Sigmund
S Conklin, Reginald
A Corbie, Francis E.
S DeMatteis, Arthur
S Derow, Harry A.
SS De Young, Benj. S.
SS Diamond, Wm.
A Drabkin, Israel E.
SS Drachman, Theo.
SS Dundes, Maurice
A Ehrlich, Irving
S Einhorn, Sidney
S Fagin, Jos.
S Falkenburg, E. E.
S Fanelli, Dominic
A Fayen, Walter
SS Feldstein, M. E.
S Feuerlicht, Milton
A Filshinsky, L.
S Fine, Marvin
S Finkelstein, Louis
A Fishoff, Ephraim
S Friedman, Jacob
SS Fuchs, Herbert
S Galburt, Samuel
SS Garvey, Michael J.
S Geller, Jacob
SS Germain, I. A.
A Ginsberg, Aaron
S Glynn, H. F., Jr.
S Goldberg, Isidore
S Goldberg, Wm.
SS Goldstein, R. L.
A Goodblatt, Morris
S Gordon, David
A Goreff, Carl
S Gottesman, Joseph
S Grabel, Samuel
A Grebanier, B. D.
S Greenberg, Alfred
S Greenberg, D. A.
A Greenberg, Louis
SS Greenberg, Milton
S Greenberg, Samuel
A Guinane, Jas. P.
A Halkin, Abraham
SS Handelman, I. E.
A Heinrich, Abr. H.
S Henry, Chas.
S Hershkowitz, H. N.
S Heynich, Geo. O.
SS Hoffman, L. W.
S Horowitz, Johann
S Jackson, Joseph
SS Jacobs, Leonard
S Jacobson, Samuel
A Josephson, Hyman
S Judge, Daniel
A July, Herbert F.
S Kamensky, Sam
S Kaminsky, Philip
S Kanner, Nathan
S Kaplan, Martin
S Karash, Sidney
S Karpilow, Samuel
S Kasindorf, David
S Kasnowitz, Abr.
A Kavenoff, Joseph
A Klaus, Samuel
A Klein, Herbert M.
S Klein, I. Benjamin
S Klein, Rubin
S Kleinstein, Samuel
S Kleitman, Milton
S Kosloff, Alex
A Krokow, Harry
S Kushner, Ivring
S Lamstein, Jacob
SS Leader, Benj.
S Levin, David J.
S Levine, David
S Levine, Edwin R.
S Levinson, Louis J.
SS Levinson, Samuel
S Levitt, Harry
SS Lewis, Irving
S Lieber, Allen
S Lifschitz, David
S Lifschutz, Alex N.
S Locker, Philip
SS London, David
SS Mandell, Sidney
S Margolin, Samuel
S Mariash, Irving
SS Mazzochi, Wm.
S Mendelowitz, H.
S Mesnik, David
A Morris, Richard B.
S Murray, Irvin
SS Nack, Irving
S Orshowsky, Nathan
S Osterman, Lewis A.
S Patterson, Alex.
A Payne, Arthur J.
S Payne, LeRoy
S Persky, David M.
SS Pomerance, Isidor
S Rabinowitz, Milton
S Rafalowsky, Julius
S Rappaport, N. H.
S Rappolt, Frank A.
A Reichgott, Milton
S Resnick, Israel
S Resnicoff, Sol
S Rifkin, Isidor
S Rikles, Bernardo
SS Rose, Isidore
A Rosen, Ascher A.
SS Rosenbluth, W. G.
S Rosenhack, Isidore
S Rosenkrantz, M.
S Rosenblum, Geo. B.
S Rosonowitz, Jack
S Roth, Mortimer
S Rudavsky, David
S Ryan, C. M.
S Saiken, Louis
A Samuelsohn, David
SS Sauber, Irving
S Sax, Solomon
A Schachnowitz, J. H.
S Schein, Hyman
S Schlachter, Rubin
S Schmach, Nathan

SS Schnurer, H. I.
A Schoenfeld, Edw.
S Schultz, Isaac
S Schuman, Charles
S Schwartz, Wm. H.
S Shapiro, Aaron
S Shapiro, Harry P.
S Sholemson, Mandel
A Siegel, Harry
A Signorelli, Thomas
S Silberg, Benjamin
S Silvestri, Vincent
A Slotnikoff, Wm.
A Solomon, M. J.
SS Some, Samuel J.
S Sonberg, Morris
SS Stanger, Samuel
S Starr, Louis
S Stein, Alexander
S Stein, Joseph
A Steinberg, Milton
S Strusinski, Nicholas
S Sussman, B. A.
S Tannenbaum, M.
S Tarter, Sol
A Tholfsen, Erling
SS Topper, Leonard S.
A Trulio, Wm.
S Turner, Wm. N.
A Vogel, Alfred T.
S Wasserberger, E. H.
S Weinstein, Joseph
A White, Morris
S Wigderson, Chas. B.
S Wilson, Harold W.
SS Wohnsiedler, Henry
S Wortman, Jacob
S Zaslaw, Alexander
S Zelfman, Abraham
S Zuckerman, I. C.
S Zwanziger, David

UPPER FRESHMAN CLASS

S Abbate, Stephen H.
S Abrevaya, Morris
S Albert, Leo
S Allen, Leon J.
A Alleva, Alexander
S Altchek, Emanuel
A Amato, Isaac
A Amdursky, A. J.
S Auerbach, Isidor
SS Barman, Harry
S Barnett, Abraham
S Barris, Abraham H.
S Barsky, Abraham
A Battaglia, J. A. L.
S Baum, Albert G.
S Baum, Harry
SS Becker, Isidore
S Bedri, Marcel
S Begun, Louis
S Beller, Charles
SS Benedetto, J. B.
SS Berg, Meyer J.
SS Berman, Jeremiah J.
S Bernhard, Robert
SS Bershad, Robert
S Binder, Hyman
SS Birnbaum, Ralph
S Bitter, Harry
S Blaustein, Morris
S Bloch, Harry
A Bluestein, Milton
SS Botwen, Milton
S Boyarsky, Meyer
S Brenner, Joseph
SS Brower, Nathan
S Brown, Stephen J.
S Chaudruc, Juan E.
S Chinitz, Alexander
S Cohen, Louis J.
S Cunningham, H. C.
SS Deutsch, Bernard
SS D'Andrea, Philip
S Denzler, Paul A.
S Diasio, Joseph S.
S Disanza, Morris A.
S Dondero, John
SS Driscoll, David D.
A Driscoll, Richard V.
S Eberman, Arthur A.
S Eisenberg, Robert
S Elfenbein, Samuel
S Epstein, Max
SS Ettinger, Clifford
S Fahrer, Louis
S Feinsot, Isidor
S Feldman, Chas. W.
S Feuerstein, D. E.
S Finkelman, Isidore
S Fish, Nathan
A Fisher, Henry
SS Franzblau, Isadore
S Fred, Harry
S Fredel, Harold R.
S Frey, Marcy
A Friedman, Louis
S Friedman, Samuel
S Gaze, Abraham
S Gelber, Samuel
A Gilbert, Harry
S Ginsberg, Harold
S Girard, Clarence
S Glass, Samuel
S Glassman, George
S Godlin, Albert
SS Goldberg, Morris
SS Goldberg, Ralph
A Goldman, William
SS Goldstein, Joseph
A Grand, Charles
S Green, Neal J.
S Greenberg, Philip
A Greenblatt, Michael
S Grosselfinger, E.
S Grossferstand, H.
S Guttman, Seymour
A Halprin, Morris
S Hanft, Sol B.
SS Harris, Abr. H.
A Harvey, J. B., Jr.
S Hegel, Benjamin
S Helfond, Michael V.
S Heller, Benjamin
S Heller, Samuel
SS Hershkowitz, Leon
A Hintz, Howard
S Hochfeld, George
S Hochfeld, Joseph
S Hoffman, Joseph L.
SS Hollander, Samuel
A Hornstein, Geo. D.
A Hulkower, David
S Hyman, Harry
S Ingoglia, Nicholas
A Isaacs, Archie E.
S Itjen, Eugene M.
S Jaffe, Abe
S James, Sidney
SS Janek, William
S Josepher, Sol. Chas.
S Juskowitz, Sidney
SS Kail, Milton
S Kaplan, William
SS Kaplowitz, Wm.
S Kaslofsky, Gabriel
SS Kassoy, Israel
A Keidanz, George
S Kemelhor, Michael
SS Kessner, Jerome
A Kirsch, Abraham
S Kissner, Morris
A Klibanoff, Max
S Klieves, Charles
S Koral, Max
S Korovin, Morris
S Kramer, Saul
S Kukiel, Chauncey J.
S Kulick, Abr. A.
S Lane, Victor
S Lang, Abraham
S Lankenau, J. C., Jr.
SS Latzer, Paul
S Lazar, Isaac

A Lazowick, M. A.
S Lefkowitz, Milton
S Leto, Alfred M.
S Levine, Max B.
A Libin, Isaiah
SS Libman, Irving
S Lieberman, David
SS Lifshitz, Albert
S Litowitz, Nathan
A Livingston, H. A.
S Lotto, Selig
A Lubowitz, Louis
S Lyons, Hyman
S Maibach, Hyman
A Malkan, Arnold J.
S McCarthy, T. F., Jr.
S McCarty, Stedman
A McConnell, John
S McCoy, Fleetwood
A McCreedy, Robert
S McDonald, A. P.
SS Meeropol, Abel
S Meier, Walter
SS Mendelowitz, H.
S Messing, Louis
SS Metz, Irwin
SS Meyer, Charles
S Meyer, Joseph
S Meyer, Victor
S Milazzo, Peter
A Milder, Emanuel
S Miller, George H.
S Miller, Saul
S Miller, Simon
S Mintz, Jacob B.
S Moskow, Isadore
S Nacovsky, Wm.
S Nagler, Benjamin
S Neuschatz, Jacob
S Nicolais, Michael
S Novis, Irving
S Noyes, Haydon T.
S Ochakofsky, Chaim
SS Olesen, Fred
A Orgel, Joseph
A Osber, Maurice
S Oshinsky, Louis
S Ossinovsky, Jacob
S Ossinovsky, Joseph
S Paley, Isidore
S Palitz, Leo
SS Pardon, Raymond
S Parris, I. E. R.
SS Pelofsky, Samuel
SS Perlman, Benjamin
S Picker, Alfred
S Pike, E. Nathan
A Pisciotta, Jos. H.
S Plechner, W. Wm.
S Plotkin, Hyman
S Pope, Clarence
S Prevor, Morris A.
A Rabinovitch, M. L.
S Raisman, Victor
S Rannus, Arthur T.
S Reich, Enoch
S Reichman, Theodore
SS Reisman, Simon
S Richter, John
S Rieser, Chas. E.
S Ripps, Isidore
A Rodolf, Frank M.
S Rofrano, Michael L.
S Rogenstein, Wm.
SS Rosdall, Samuel
S Rosenberg, Edwin
SS Rosenberg, Sidney
SS Rosenfeld, Isidore
S Rosin, Morris
S Rothenberg, Harry
S Rothenberg, S.
A Rothman, Jos. H.
S Rothstein, Abr. I.
A Ryan, Frank A.
S Sader, Julius
S Safferstone, Irving
S Sasonkin, Abraham
S Schade, G. Palmer
S Schiff, Harry M.
S Schifter, Leonard
S Schindelheim, A.
S Schneider, Louis
S Schor, Joseph
S Schulze, Walter
SS Schwartz, Bernard
A Schwartz, Herbert
S Schwartz, Solomon
A Schwarz, Sanford
S Scovill, F. Leroy
SS Segal, Irving
A Sendler, Murray
S Shapiro, Abraham
S Shapiro, Benjamin
S Shapiro, Harry
S Sharoff, Victor S.
S Sheinit, Harry
S Sher, Joseph
S Shufro, Salwyn
S Shure, Harry
SS Siegel, Benj. A.
A Siegel, Morris
S Siegel, Nathan
A Sigelschiffer, Saul
A Silberg, Morris
S Silverstein, Barnet
A Silverstein, Harry
S Silverstein, Hyman
S Silverstein, Joseph
S Singer, Jacob
S Sjorgren, C. LeG.
A Slotkin, Abraham
S Smelensky, Simon
SS Sobel, Samuel
S Solomon, M. L.
S Solomon, Morton J.
A Sorkin, Samson
A Spiegel, Joseph
S Spiegel, Leo
S Spitz, Morris
S Stark, Julius M.
SS Steinberg, Max
S Stone, Gilbert
S Storch, Theodore
S Strudler, Ralph
SS Sucrowitz, Jacob
S Suriano, Succorso
S Swertlow, Isidore
S Tager, Harry L.
S Tannenbaum, H.
S Tarangelo, Wm.
SS Tenenbaum, Samuel
S Thaler, Nathan
S Tille, Samuel
S Tolmach, Jesse
A Trachman, David S.
S Tubelle, Murray
S Umansky, Mark
S Van Meter, W., Jr.
S Vann, Samuel
SS Vladimir, Irwin
SS Vogel, Henry
S Wachtel, H. M.
S Wagner, Simon
S Wallach, Harry
S Wallack, Charles
S Warshall, Harry
S Wasserman, I. J.
S Weil, Ernest K.
S Wein, Morris
S Weingold, Irving
A Weisberg, Jack
SS Weiss, Alfred L.
A Weissman, Hyman
S Whitfield, Jas. E.
A Whynman, Alex
A Windsor, John
S Wingebach, Arthur
S Wingebach, W.
S Wishengrad, H.
S Witchell, I. S.
S Wolf, David
SS Wolfe, Herman
SS Wolford, Mortimer
A Wolfson, Martin
A Wolk, Samuel J.
S Woolf, Samuel
S Yolles, Jack

S Yurowitz, Sol
S Zamurute, Hyman
S Zimbler, Nathan
S Zimmerman, Fred
S Zimmerman, Reuben
S Zitron, William
S Zollino, Anthony

LOWER FRESHMAN CLASS

SS Abelson, H. H.
S Alberlin, Edw. H.
SS Abraham, Arthur
A Abrams, Abr. D.
A Abramson, Henry
S Adda, Jas.
A Adolph, John, Jr.
S Agins, Ralph
S Alpern, Herman D.
S Altman, Morris
S Ament, Philip L.
S Antenucci, M. M.
S Areskog, I. O. B.
SS Aronowsky, B. L.
A Artzt, Max
S Asofsky, Samuel
A Auerbach, David E.
S Austin, Maurice
S Axelrod, Aaron
S Backlar, Samuel
A Bailey, C. E. S.
A Balamut, Oscar
A Balamuth, Lewis
S Baras, Abraham
SS Bark, Samuel
S Barkan, Louis
S Baron, Carl
S Bartelstone, Grant
S Bass, Hyman
S Bauer, Albert
SS Beagle, Simon
S Becker, Lee
S Behrens, Alvin
S Beilenson, B. P.
S Benedek, Alexander
S Bentsman, Morris
SS Berall, Nathan
S Berkowitz, Louis A.
SS Berkowitz, Morris
S Berlatsky, Louis
S Berlinsky, Solomon
S Bernstecker, Emil
S Bernstein, A. J.
SS Bernstein, Harry
A Berson, Rubin
S Berson, Rubin
S Besdine, Abraham
S Beslowitz, Alex
A Beyer, Joseph
S Bibbo, Canio
S Bilinsky, Bernard
S Birn, Henry A.
S Birnbaum, Wm.
S Blanc, Eugene
S Blank, Julius
S Blankleder, Joseph
S Block, Abraham
S Block, Herman
S Blom, Lucier
SS Bloom, Harry
A Boehm, Fred
S Bolden, Joel V.
S Bongiorno, Jos.
A Boris, Maurice H.
S Borell, Vincent
A Bowden, Henry
A Brauer, Morton
S Brecker, Sol
S Brennglass, Mark
S Breslow, Leonard
A Bressler, Alfred
S Brinkley, Frank L.
S Broadnax, Otis
S Broder, Wm.
S Broder, Wm. J.
S Brodie, Joseph
A Brodsky, Abr. H.
S Brodsky, Saul
S Brodsky, William
S Brody, Henry
S Bromberg, Julius
S Brotherton, Wm. W.
S Brown, Daniel
S Brown, David
S Brown, Emanuel
S Brown, George
S Buchalter, Abr.
S Buchalter, Max
A Buchbinder, S. J.
S Buchman, Moe
S Buckley, Walter
S Buray, Ferdinand
S Burger, Harold
S Burke, John
SS Busch, August
S Cahanovsky, Abr.
S Cantor, Bernard
S Cantor, Max
S Cantor, Max B.
S Caporale, John H.
S Cares, Reuben
S Carlino, Chas. I.
S Catalano, Joseph
S Causgrove, Wm.
S Cecire, N. B.
SS Charash, Nathan
S Chavin, Elias
S Cheifetz, Isidore
A Citron, Solomon
S Clancy, John G.
S Clay, Arthur N.
S Cleaver, Frederick
S Clements, Alfred B.
A Cobb, John R.
S Cohen, Arthur
S Cohen, Henry
A Cohen, Hyman
S Cohen, Isidor E.
A Cohen, Jacob S.
S Cohen, Jonah
S Cohen, Julius
S Cohen, Leon
S Cohen, Meyer
S Cohen, Meyer B.
S Cohen, Nat J.
S Cohen, Samuel
S Cohen, Theodore
SS Cohn, Jack
S Coleman, R. M.
A Connolly, Joseph
S Conrad, Herbert S.
A Copstein, S. A.
S Corbett, Jas. F.
A Crabb, Frederic N.
SS Creamer, Maurice
SS Crownfield, A., Jr.
A Cully, Joseph T.
S Dain, Charles
SS Damsky, Hymen
A Danis, Sidney H.
S Dankowitz, E.
A D'Arata, Edw. J.
S D'Augusta, Philip
SS Davidson, Irving
A Davis, Charles B.
S Davis, Samuel
S De Cotiis, John C.
S Dendy, Robert Y.
S Diamond, Abr. I.
S Diamondstone, Jess
S Dickler, Sidney
S Dickman, Harry
S Dinhofer, Herman
S Doyle, Thomas
S Draper, Joseph W.
S Dreyer, Reynold
S Drucker, Abe
S Dulitzky, Leon
A Dury, Herbert
S Eaton, Joseph
A Ebin, Milton
S Edelman, David
S Edelstein, Victor
S Edis, Abraham
S Eisen, Joseph
S Eisenberg, M. B.

SS Eisenberg, Rudolph
S Eisnitz, Howard
SS Eliasberg, Robert
A Einhorn, Daniel
S Elterich, Alton
S Engelhardt, J. O.
S Eppolito, A. J.
SS Epstein, Charles
S Epstein, Morris
S Epstein, Schachna
S Evelyn, M. D.
A Evensky, Abraham
SS Farber, Samuel
A Farkas, Nicholas
SS Feinberg, David
S Feinstein, Isidore
S Feinstein, Solomon
S Feit, Emanuel
A Feld, Morris D.
A Feldberg, Emanuel
S Feldman, Louis
S Ferderber, Wm.
S Fexas, Achilles
S Ferro, Joseph
S Fink, Moses
S Finkelstein, Lester
S Finkler, Sigmund
A Finn, Harold B.
A Fischbach, Isaac
S Fishback, Hyman
S Fisher, Jacob D.
A Fishman, Felix
A Flattery, F. Jas.
S Flax, Israel S.
S Flaxer, Abraham
S Fleckles, Elliott V.
S Flynn, Claude D.
S Fogler, Harry
S Fortinash, Wm.
S Fortunoff, Saul
S Fox, Herman R.
S Fox, Patrick H.
S Frankel, Hyman
S Frankfort, Jacob
S Frankowitch, Max
A Freedman, Harry
S Freid, Julian
S Fried, Joseph
S Friedland, Benj. M.
S Friedland, David
S Friedlander, Jacob
SS Friedman, Aaron H.
S Friedman, H. A.
S Friedman, Irving
S Friedman, J. H.
S Friedman, Julius
S Frolich, Abraham
S Frosina, John
S Frumberg, Milton S.

A Fuchs, Edward
S Fuhr, Irving G.
S Furlonge, Leslie
S Gabin, Joseph S.
A Gaffney, Geo. C.
A Gallen, Milton
S Gallinger, Benj.
S Gallo, Roland
S Ganser, Max
S Gardner, John
S Garfiel, Theo. C.
S Garfinkel, Abr.
S Gartenlaub, Charles
S Gatyas, Julius
S Gaulé, George
S Geller, Max
S Gellert, Sidney
A Ger, William
S Gernsback, Geo. B.
SS Getter, Herman
S Gewant, Alexander
S Giardina, A. L.
S Giardino, William
S Gilgulin, Joseph
S Ginsburg, Samuel
S Giocolano, Ralph
S Gitken, Robert
S Gluck, Arthur
S Gluck, Emerick
S Gogel, Bernard
S Goldberg, Charles
S Goldberg, Fred
A Goldberg, Isidor
A Goldberg, Max
S Goldblatt, Isidor
S Goldmacher, Hyman
S Goldman, Lester J.
S Goldschmidt, Albert
S Goldstein, Benj.
S Goldstein, Louis
S Goldstein, M. S.
A Golin, Reuben
S Golomb, Julius
A Goodman, David
S Goodman, Jesse
S Goodson, Lewis
A Gordon, Mort. S.
S Goreff, Leo. I.
S Gottesman, H. L.
S Gottschall, Sidney
S Governale, Vincent
SS Granich, Leonard N
SS Green, Morris
S Greenberg, Alex.
S Greenberg, Henry
A Greenberg, Samuel
S Greenblatt, Monroe
SS Greissgrow, Harry
S Griffin, Chas. H.

S Gross, Jerome
S Grozalsky, Philip
S Grusetz, Matthew
S Gruskin, Harry
S Gucker, George
S Gunshor, Isidore
S Gurfield, Ralph J.
S Haber, Morris
S Hahn, Harry
S Halpern, Ben
S Halpern, David
S Halpern, Max
S Halpern, Walter J.
A Hamburg, Maurice
SS Handler, Sidney
S Harris, Abraham
S Harris, Isador
S Healy, Eugene
S Hecht, Isaac
S Held, David H.
S Hellman, Milton
S Henlein, Willard E.
SS Hershowitz, Louis
S Hersonsky, Jacob
S Herzog, Asa S.
S Hill, Raymond
S Hillman, Samuel
SS Hirsch, Philip J.
S Hochberg, Theodore
S Hoffman, Moses
A Holley, Emilio T.
S Hoorak, Irving
S Horn, Benjamin
S Hornick, Harry
S Horwitz, Ralph
S Howe, George
S Howe, Herman
S Huber, Joseph
S Hudson, Lawrence
S Huie, Albert
S Hurst, Morris
A Hurwitz, Benjamin
S Imperato, Alfred
S Isaacs, Irving L.
S Isaacson, Sidney
S Iskoe, Leland
S Itzcowitz, L. L.
S Itzikowitz, Leo.
S Itzkowitz, Benjamin
S Jablons, Fred
S Jacobs, Abraham
S Jacobs, Max
A Jacobs, Walter
S Jaffe, Frank
SS Jampel, Carl
S Jenkin, Barney
S Jocker, Meyer
A Johnston, Jos. E.
A Jolt, Harry

A Jurow, Isadore
S Kadish, Samuel
S Kagle, Leo
SS Kahn, Chester L.
SS Kaiser, Morris
S Kalkstein, David
SS Kamenetsky, Harry
A Kantrowitz, Henry
S Kaplan, Harold
S Karp, Aaron
A Kassell, Mortimer
S Katz, David
A Katz, Isidor B.
S Katz, Jack
S Katz, Milton
S Keaveny, Felix J.
A Kehl, Hyman Wm.
S Kellner, John A.
S Kessler, Frank
S Kiczales, Solomon
S Klein, David
SS Klein, George G.
SS Klein, Julius
S Klein, Nicholas
S Klein, Samuel A.
S Kleinberg, Max
S Kleinman, Philip
A Knox, Israel
A Kodner, Philip
S Kogel, Marcus D.
S Kopelman, Leon A.
S Koplin, Charles
S Kosachiner, Jacob
S Kossack, Milton
S Kotick, Louis
S Kransdorf, Morris
S Krasnoff, Harry M.
SS Kriegel, Max
S Krosnow, Samuel
S Kuriansky, Jos.
S Kusdin, Abraham
S Kutschuck, Henry
A Kwalwasser, Abr.
S Landy, Hyman
S Lang, Louis
A Langsam, Jacob
S La Russo, Vincent
S Laven, Henry
S Lazarowitz, Nathan
S Lazarus, Louis
A Leavitt, Irving
S Lebsky, Louis
S Lederfind, Hyman
A Lefkowitz, Harry
S Lefkowitz, Raymond
S Lehrman, Solomon
S Leibowitz, Oscar
S Lepore, Remigio
S Lerner, Isidor
S Lesk, Isidore
S Lester, Thomas A.
S Levenson, Henry
S Levin, Harold A.
S Levine, Alexander
S Levine, Alexander
S Levine, Benjamin
S Levine, Benj. H.
S Levine, Herman
A Levine, Max D.
S Levine, Ralph R.
S Levine, Samuel
S Levinson, Sidney
S Levitas, Abraham
A Levy, Meyer
S Levy, Samuel
S Levy, Samuel B.
S Licata, Francis J.
S Lichtenstein, Morris
SS Lieberman, Benj.
SS Lieberman, David
SS Leibowitz, Abraham
S Liebowitz, M. M.
A Lien, Herbert
A Lifschitz, Aaron
S Linick, Samuel
S Lipetz, Bernard
A Lipkind, William
SS Livingston, Joseph
S Loccisano, Dominic
S Lo Frisco, Anthony
SS Looker, Sidney
S Lopez, Arturo M.
S Lo Piccolo, Comingio
S Low, Hermon M.
S Lowenbraun, Abr.
S Lozano, Francis
S Lubinsky, Alex. E.
S Lusterman, E. A.
S Ly, Wendell
A Lynn, Irving
S Machover, Benj.
A Mack, Walter Jos.
A Maclin, Austin W.
A Maday, William
S Magid, Harry
SS Maiorino, D. L.
S Malerba, Benj. P.
S Malkin Harry
S Mandel, Frank
S Mandel, Isidore
SS Manheimer, Meier
S Mankowitz, Joseph
S Manoil, Lazarus
S Marasco, Anthony
S Marcus, Abraham
A Margolies, Leonard
S Margulies, Chas.
S Markowitz, J. H. S.
S Markus, Deszo
S Markus, Noah
A Marshall, Samuel
SS Match, Pincus
S Matelson, S. S.
S Mauro, Gasper
SS McCarthy, Herman
A McCarthy, Stuart
A McCarthy, Thos. H.
A McCullough, R.
S McKenna, L. J.
S McMillan, K. J.
S McTague, Dennis D
S Meadows, Carl O.
S Meadows, N. B.
SS Meister, Max
A Meltz, Samuel L.
S Meltzer, Max
S Melva, Sam H.
SS Mendelowitz, M.
SS Mendelsohn, M. S.
S Mendelson, Arthur
S Mendelson, Louis
SS Mendelson, Milton
SS Mendlowitz, L.
A Menschel, Benj.
S Merkatz, Harry
S Mesner, Leo
S Meyersohn, M.
S Michael, Geo.
S Michael, Wm.
S Michaelson, Henry
SS Miller, Benjamin
S Miller, Bernard
S Miller, David
S Millgram, Abr.
S Millman, Adolph
S Milstein, Louis
S Mina, Emilio P.
S Minevitch, Borrah
S Mischel, Jacob C.
SS Mischel, Samuel
S Mishkind, Solomon
SS Mitteldorf, Morris
S Moftey, Max
S Moses, Joseph
S Moses, Reginald
S Moskowitz, Harry
S Moskowitz, Simon
SS Mouradian, Albert
SS Mudgal, H. G.
A Mufson, George
A Mund, Jacob
S Munroe, George
S Murdock, John E.
S Murray, John
S Myers, Jacob
S Myerson, Samuel
S Nach, Robert

S Naiman, Samuel
S Naimark, Boris
S Narensky, Max
S Natanson, George
S Naylor, M. D.
S Nefsky, Aaron
S Nevelsky, Harry
S Newman, Philip
A Newmark, David
S Nichthauser, Hugo
SS Nidel, Louis
S Nikoloff, Nicholas
SS Nocifora, S. Chas.
A Ober, William
S Oberweger, Maurice
S O'Brien, E. H.
S Ogrodnick, Irving
S Opperman, Abr.
S Orlando, A. E.
S Orlofsky, Isidore
S Orzachowitz, S.
S Pagano, F. X.
S Pagowitz, Reuben
S Paley, Isidore
S Papastavrou, E.
SS Papilsky, Geo.
S Pasachoff, Samuel S.
S Paterick, Wm.
S Penner, Sol
A Pentel, Max
SS Perkins, Frank
SS Perkins, John A.
S Perlman, Geo. J.
S Perlman, Robert
S Petix, Dominick
S Petruzzi, Alfred R.
S Pfeiffer, Rubin
SS Polk, Martin
S Pollak, Arthur
A Popik, Isidor
SS Powell, Maxleon D.
A Preston, W. C., Jr.
A Quinn, Martin A.
S Rabinowitz, David
S Rabinowitz, E.
S Rabinowitz, Gideon
S Ranalli, Dominick
A Rankin, Wilfred
S Rappolt, H. G.
S Raskin, Morris
S Ratner, Henry
S Reiner, Isidore
S Reiner, Simon G.
A Reisman, Samuel
S Rensin, Hymen
S Resnick, Morris
S Richter, Theo.
S Rittenband, L.
SS Robinson, Edward
S Roodenburg, W. H.
S Rose, Harry J.
S Rose, Martin
S Rosen, Isador M.
S Rosenbaum, B.
S Rosenbaum, N.
SS Rosenberg, Lester
S Rosenblum, Max
S Rosencrantz, L.
S Ross, Maxwell
S Ross, Wm. G.
S Roth, Adolph
S Roth, Charles
SS Roth, Morton
S Rothenberg, S. A.
S Rothman, Morris
A Rothman, Nathan
S Rothstein, Israel
SS Rothstein, Lester
S Ruben, Alvyn
S Rubin, Arthur
SS Rubin, Isidore
S Rubin, Joseph
S Rud, Louis
S Rudder, Joseph
S Rudes, Isaac
A Ruffman, Louis
SS Ruhl, Warren A.
S Rutberg, Isidor
S Ryan, Wm. F.
SS Sachs, Hyman
S Sachs, Solomon
S Sacknowsky, Geo.
A Sacks, Wm. L.
S Safran, Louis
S Sahn, Martin
S Sallovitz, David
S Sammartino, Peter
S Sarner, Isidore
S Sayers, Carlton
S Schacter, Samuel
A Schaffer, Robert
S Scharfstein, Ralph
S Schechter, Hyman
S Scheinman, David
A Schenk, Max
S Schlam, Martin
SS Schlanger, Isidor
A Schlansky, Nathan
S Schneeweis, Daniel
S Schneider, Abr.
S Schneier, M. R.
SS Schrier, Milton
S Schnitzer, Louis
S Schoen, Pincus
S Schonberger, A. E.
S Schtierman ,Jacob
S Schulman, Milton
S Schulman, Moses
S Schuster, Frank
S Schwab, Irving
S Schwanewede, Wm.
SS Schwartz, R. M.
S Schwarzbach, S.
S Shadletsky, Benj.
SS Shainmark, E.
SS Shair, Milton
S Shakun, Harry
S Shapiro, Arthur
A Shapiro, Benj. L.
S Shapiro, Benj. W.
S Shapiro, George
S Shapiro, Samuel
A Shapiro, Saul
S Shaw, Aaron S.
S Shedrowitz, Chas.
A Sheppers, Morris
A Sheres, Edwin
SS Sherman, Louis
S Sherr, Leo
A Sherwood, Sam
S Shiller, Harry S.
S Shimkin, Harry J.
S Shlionsky, Herman
A Shmisman, Nat
S Siegel, Abraham
S Siegelowitz, Louis
S Siegle, Irving
S Silberg, Alex
S Silver, Edward
S Silver, Samuel
S Silver, Solomon
S Silverg, Bernard
A Silverman, A. G.
S Silverman, Benj.
SS Silverman, M. M. Jr.
S Silverstein, Abr.
S Simon, Emanuel
S Singer, David
SS Siskind, Aaron H.
SS Smith, Raymond A.
SS Smith, Thomas F.
S Soffin, Rubin
SS Sokolowsky, Alex.
S Soll, Samuel
S Soloshitz, Max
S Sonderman, Gerhard
S Sonnenreich, Chas.
S Sootin, Harry
S Sotiropulos, A.
S Spector, Morris
A Spiegel, Wm. A.
A Spier, Isidor
S Spina, Pasquale J.
SS Spindel, Samuel
SS Spitz, Henry
S Spotsey, Harry L.
A Squire, Abraham

A Stachenfeld, E.
SS Stammer, Victor
S Stein, Harold
S Stein, Nathan
S Steindler, Arthur
S Steiner, Morris
S Stern, David
S Stern, Nicholas
S Stern, Oscar
S Sternick, Adam
S Strier, David
A Sugar, Samuel
S Suib, Louis
A Sulman, Aaron
S Sultar, Abraham
S Sussman, Aaron
A Sussman, Julius
SS Sutro, Charles
SS Taglialatela, P.
S Taig, Henry
SS Tannenbaum, H.
S Tapolow, J. J.
S Tarr, Philip
S Taub, Jesse
S Tauber, Leo
A Teodorini, O. R.
S Teschner, Adolf
S Tetzloff, W. W.
S Thom, Thos. K.
S Thompson, Allan
S Thoren, Earl
S Tilles, Irving
S Tilles, Martin
A Timpone, Ignazio L.
SS Tischler, Ernest
SS Todes, Jules
S Toonkel, Max
S Trachman, Julius
S Trager, Frank
SS Tripp, Samuel S.
SS Tubridy, Frank
A Tucker, Joseph
S Unger, Max
SS Valenti, August
S Van Cott, K. I.
S Verter, Louis
S Vioni, Arthur A.
S Vivirito, Philip R.
S Vivona, A. Alex
S Vogel, Saul
S Volckhausen, Wm.
A Waidler, Russell
S Walker, S. L., Jr.
S Ward, Andrew J.
S Warsaw, Julius
A Washor, Albert
SS Wasserman, Jesse
A Wegman, J. B.
S Wehmeyer, Henry
S Weill, Joseph
S Weinberger, Edgar
SS Weinbloom, David
S Weiner, Max
S Weinman, Irving
A Weinstein, C. C.
S Weintraub, Milton
S Weiss, Aaron
S Weiss, Joseph
A Weiss, Morris H.
S Wenzell, Howard
S Wepner, Henry
A Werblowsky, W. H.
SS Wielar, Howard
S Wiener, Benjamin
S Wiener, Philip
S Wiener, Philip L.
S Williams, Michael
S Wilson, James T.
S Wilson, Lawrence
S Wishinofsky, Meyer
S Wittes, David
A Wolf, Benedict
S Wolfson, Nathan
A Wolinsky, Abraham
SS Wolos, Jacob
S Wolpert, Malcolm
SS Wolsk, Samuel
S Wyche, Rudolph M.
A Yamin, Leo
S Yannet, Herman
S Yarnis Harry
S Youdelman, A. S.
S Zaubler, N. W.
SS Zatalowsky, I. D.
S Zeigen, Samuel
S Zeitz, Samuel
SS Zimmer, Louis
S Zimmerman, Benj.
A Zisowitz, Samuel
S Zizmor, Frank
SS Zuckerberg, Nathan
S Zussman, Bernard
A Zwick, Benjamin

School of Technology

Ashworth, Irving F.
Atkin, Harry
Bonatsky, David
Clapp, Henry B.
Cruse, Creighton
Fink, Harold
Fisher, Henry G.
Fuchs, Samuel J.
Fusco, Alphonse A.
Hoeflinger, Louis
Hoffman, Jacob
Horowitz, Nathan
Kennedy, Francis G.
Kunz, William W.
Marr, Naiman
Milgram, Harry
Moness, Elias
Murray, Frank A.
Newman, Harry
Rabinowitz, Joseph
Resnikoff, Louis
Scerbo, Fred
Smolderen, Ferdinand
Tapparo, John A.
Wolff, Leo

School of Business and Civic Administration

Abelson, Louis
Bobrick, Isidore
Borock, Samuel S.
Bova, Ralph
Cohen, Joseph
Dobbins, Christopher
Dubin, Bernard
Fuchs, Louis
Ginsberg, Alexander
Korn, Irving
Krosnor, Isidor
Kupersmith, Michael
Loccisano, James
Marshak, Harry
Mina, Gonzalo A.
Rose, Arthur
Ruthoser, Harry J.
Stienbach, Max
Weinstein, Fred
Yaffe, Louis P.

Special Students

Applebaum, Peter
Armstrong, Joseph C.
Aronsohn, Morton
Atikian, H. Meserole
Axelrod Harry
Battle, Walter F.
Berman, Abraham B.
Blattman, Aaron M.
Braverman, Louis
Buckvar, Oscar
Chesen, Henry
Chu, Tsung-Pang
Cohen, Carl M.
Cohen, Eli
Cohen, Paul
Cohen, Victor Hugo
Delany, Lucius L.
Devine, Evarist J.
Dicker, Isadore
Egan, John
Feldman, Benj. W.
Feinsilber, David M.
Felix, Joseph
Fermaglich, Harry B.
Figlin, Isidore
Fischl, Arthur A.
Friedenthal, Louis
Ginsberg, Leon
Goldin, Isidore L.
Goldin, Nathan
Goodman, Herman
Holzsager, Theodore G.
Howard, Raymond A.
Howell, Edward L.
Intiso, Dominic
Jankowsky, David
Jenkins, Connie H.
Kahn, Morris H.
Kassner, Moses
Levin, Ned
Liptzin, Solomon
Litmanowitz, S. Victor
Lukin, Nathan
Macleod, Wm. R.
Matthews, Samuel J.
Matsuba, Takusuke
Mazurkiewicz, Ladislaus
McCoy, Cecil A.
Mendelsohn, Harry L.
Milgram, Joseph
Milikow, David L.
Milone, Dominic E.
Perlin, Henry
Peshkin, Jacob
Root, Nathan
Sand, Harvey
Schwartz, William A.
Scovner Joseph
Shapiro, Herman G.
Singleton, Paul J.
Siskind, George
Slochower, Max
Sonkin, Simon
Stambler, Benedict
Streicher, Samuel
Sugarman, Jacob
Tannenbaum, Israel
Tarr, Leonard
Tartak, Elias
Trinidad, T. Clemente
Weinberg, Jacob
Woolf, Morris

Non-Matriculated Students

Brown, Fred T.
Coleman, John R.
Dailey, John A.
Dalton, Schuyler N.
Horan, Jason O.
Johnson, George C.
Johnson, James A.
McAlpine, Donald S.
Nicolaides, Nicholas
Platman, Abraham
Samuel, James
Skelly, Patrick A.

MATRICULATED STUDENTS IN THE EVENING SESSION

MAIN BUILDINGS

College of Liberal Arts and Science

Aisenberg, Eva
Aisenberg, Sarah
Ajam, Mustafa J. H. B.
Akselrad, Herman
Akülin, Sadie
Akulin, Stella
Alexander, Prince W.
Allen, Harrison H.
Alt, William
Aran, Gilberto B.
Atlas, Nicholas
Averbuck, Sam H.
Axelrad, Solomon
Bachrach, David
Backlar, Samuel
Bagley, Maurice A.
Baker, Nathaniel P.
Baker, Sylvester
Baldwin, Raymond C.
Balg, Joseph
Bandes, Michael
Barst, Bernard
Baum, Jonathan
Becker Sarah
Begg, Roy
Beller, Herbert
Bergenstein, William
Bergenthal, Hugo
Berkofsky, Frederick
Berkowitz, Isidor
Berman, Morris
Bernstein, William J.
Berres, Alexander
Bertelone, Thomas
Bertsch, Marguerite
Biederman, Max
Biggart, Florence
Bigley, Joseph H.
Billion, Frank
Binencorn, Ruth
Birnbaum, Bertha
Birnbaum, Morris
Bitterbaum, Jesse
Blank, Vera Leonora
Blatman, Leon S.
Blitz, Angelina
Bloch, Herbert A.
Block, Ruth
Bloom, Jack
Blum, Morris
Bodnar, Bartholomew
Bohrer, Abraham
Bossenberger, Walter H
Boxer, William J.

Brauer, Louis H.
Braunstein, Leo E.
Braverman, Rebecca
Brizzolara, Alfred
Brody, Alexander
Bronstein, Abraham
Brooks, Alfred J.
Brown, Arthur Mandel
Brown, Muriel A.
Buccino, Madeline
Bumfeld, Ida
Burakoff, Morris
Burg, Joseph
Burns, Vincent Gerard
Byrne, Audrey Edith
Byrnes, Joseph J.
Cadisch, Gordon F.
Cahen, Leon R.
Caldwell, Randolph
Cashin, Joseph A.
Castleman, Maurice R.
Causgrove, William
Cerina, Joseph A.
Challenger, Thomas
Charniak, Samuel
Chasanoff, Ephraim
Chaskin, Stella
Cheifetz, Alexander
Chitraro, Dolores
Cicero, Frank
Cinamon, Lionel
Clark, Katherine
Clemons, LeClare F.
Coats, Harry P.
Cohen, Abraham I.
Cohen, David
Cohen, Isaac
Cohen, J. Meyer
Cohen, Jacob M.
Cohen, Mitchell R.
Cohen, Rosa
Cohen, Samuel
Collenburg, Monroe
Collette, Thomas A. F.
Colosi, Natale
Connor Kathleen G.
Cooper Philip
Cory, Albert N.
Courtney, George L.
Crasner, Benjamin
Cronenberg, Sampson
Crooke, Abram B.
Crowley, John C.
Culberson, John L.
Cullen, John Manly
Dalheim, Alvin
Damico, Daniel
Danelson, Emily
Dann, Matile E.
D'Arata, Edward J.
Davidoff, Mary R.
Davidson, Mehel
Davila, Ramirez Alejo
Davis, Harry E.
Davis, Hyman
Dawson, James J.
Deckelman, Isador
DeCotiis, John C.
de Francisci, Mary T.
Demsey, Bernard
Dick, Augusta
Diemont, Marc
Dominitz, Emanuel
Donn, Pearl
Douglas, Susan
Doyle, Daniel J.
Doyno, Myron
Drapkin, Rose E.
Drazin, Morris
Driscoll, John J.
Dubin, Abraham
Dunkelsberg, Jack
Echental, Solomon
Eckstein, Rose
Edelman, Irving
Edelman, Joshua
Ehrenreich, Milton E.
Eidelsberg, Rose
Eisenberg, Charles
Eisenstadt, Olga
Eisenstadt, Sadie
Eisenstat, Archer
Elbogen, Nicholas
Elowitch, Therese
Englander, Ralph
Ente, Leodv
Epstein, Sara
Erdreich, Sadie
Ermini, Amerigo
Eustace, Mary M.
Evans, Robert E.
Factor, Henry J.
Fainaru, Herscu
Falk, Sigmund
Falkenflick, Samuel
Fallon, Mary
Farkas, Frederick
Fass, Florence
Faur, Tiurbe Emil
Feder, Edward
Feder, Isidore
Feier, Richard
Feigenbaum, Bernard
Feinberg, Isidor
Feingold, Samuel
Feinman, Jacobo
Feldman, Saul J.
Feldman, Simon
Feldstein, Bertha M.
Feldstein, Nettie E.
Feltman, Jacob
Fennelly, Joseph F.
Fenton, Samuel Wilfred
Ferber, Hyman
Fermaglich, Harry B.
Ferrer, Alfred
Fickner, Morris D.
Fidelholz, Clara
Fischel, Leo
Fishbine, Adolph
Flacks, Ida
Fleindenis, Josef
Fluss, Leo
Frank, Jacob
Frankenstein, Chester
Freilich, Sophia
Freimaurer, Harry
Fried, Bernard
Friederich, Rudolf John
Friedland, Sarah
Friedman, Barney
Friedman, Florence
Friedman, Kadish
Friedman, Michael
Friedman, Sidney
Frolich, Moses
Fuchs, Arthur W.
Fuchs, Joseph J.
Fuchs, Julian
Gallo, Eugenia K.
Garlock, William J.
Geher, Reuben
Geist, R. Charles
Gelb, Sidney L.
Gelber, Isaac
Gelber, Jacob Saul
Genselowitz, Abr.
George, Philip
Gershun, Fannie
Gerstein, Isidore
Ghirardi, Orestes S.
Giller, Julius
Gillis, Thos. H. G.
Ginsberg, Louis
Girard, Clarence J.
Girard, Hubert
Glaberman, Philip
Glass, Max
Glaubach, Samuel
Gold, Max M.
Goldberg, George H.
Goldberg, Jacob
Goldberger, Aaron
Goldenberg, Esther
Goldfarb, Mollie
Goldig, Aba
Goldman, Mary

Goldman, Max
Goldstein, Isaac
Goldstein, Joseph
Goldstein, Philip
Goldstone, Morris
Goodman, Herman
Goodman, Max
Goorian, Barnett
Gootner, Meyer
Gordon, Harry
Gordon, Louis
Gordy, Louise
Gravitsky, Abraham
Grayzel, Rose
Greckpitz, Jacob
Greckpitz, Morris
Green, Herman J.
Green, Rita
Greenberg, Charles
Greenberg, Louis
Greenfield, Moses H.
Greenspan, Morris
Greenwald, Helen
Gringorton, Israel M.
Grosfeld, Joseph
Gross, Helen C.
Grossman, Harriet
Grunauer, Harold
Gruskin, Benjamin
Gulack, Abraham
Gunning, Roland E.
Gushinowsky, Fannie
Gustafson, Florence
Haas, Joseph
Hahn, Charles
Halper, Herman
Halpern, Max
Hannerman, Lillian
Hardenburgh, Nell M.
Harkavy, Joseph
Harkawy, Sarah
Harris, Archibald
Harris, Harold
Haug, Andrew
Hecht, Rae
Heimlich, Milton
Heimowitz, Rachael
Heitsmith, William J.
Heller, Jack
Helpern, Milton
Henry, Charles M.
Henzel, Herbert T.
Herold, Herbert
Herold, Mandel
Herrmann, Albert E. J.
Herskowitz, Viola
Herzog, Eugene
Hinden, Hyman M.
Holt, Walter Wm.
Honan, Chas. Jerome
Hood, George, Jr.
Horne, Frank S.
Horney, Leo
Horwitz, Israel
Howe, Herman
Hoyte, Elliott
Hunt, Gilman Chas.
Huppert, William
Hurwitz, Bessie
Ifland, Edward W.
Indebaum, Rose L.
Isaacs, Herman N.
Isaacs, William
Israel, Martin
Jaboolian, Arax
Jacobowitz, Leonard
Jacobs, Jerome H.
Jaffin, Marion
Janek, William
Japhe, Emanuel I.
Jarshower, Jos. Wm.
Jenkelefsky, Regina
Jensen, Hilman
Job, Cveto E.
Joffe, Bessie
John, Thornton S. E.
Johnson, George C.
Jones, Franklin
Joseph, Archibald A. A.
Kalkut, Adolph
Kanner, Eve W.
Kaplin, Ada
Kapner, H. Leo
Katz, Abraham
Katz, Esther
Kauffman, Celia L.
Kaufman, Beatrice R.
Kaufman, Maurice
Kaufman, Samuel
Kelley, Thomas J.
Kelly, Anna C.
Kerto, Edna
Khasan, Leon
Kibitz, Adolf
King, Elizabeth R.
King, Lawrence H.
Klatsko, Aron
Klatsko, Paul
Klein, Morris
Kleinberg, Myer
Kleinman, Isidore
Kletter, Mendel
Klinger, Hyman
Knox, Israel
Koch, George W.
Kolker, Moses
Korminsky, Abraham
Korner, Harry
Kranzberg, Max H.
Krasawitz, Saul
Krasinsky, Frank
Kreindler, David
Kremenetzky, Samuel
Krosnick, Morris
Kuebler, Wolfram
Kupper, Morris J.
Kurtz, Max
Kushelowitz, Harry
Kushner, Morduch
Landauer, Morris M.
Landsman, May
Lang, Daniel
Lang, Gertrude
Lang, Louis
Laster, Isaac
Lastman, Jacob
Lawrence, Margaret
Lazar, Arthur
Leavitt, Albert M.
Lebedun, Milton
Lederman, Joseph
Lees, Rebecca
Lefkowitz, Milton
Leichter, David
Lenof, Samuel M.
Lercher, Juda
Leslie, Linden C.
Levine, Benjamin
Levine, Isidore
Levine, Jacob M.
Levinson, Julius
Levy, A. Morris
Lichtenstein, Edith
Lichtenstein, Henry M.
Lillerschlag, Isaac
Lind, David R.
Linn, Anne E.
Litman, Herman
Lipschitz, Helen
Lipton, Jacob
Litsky, Evelyn
Loftus, Eleanor
Lomuller, Victor
Loonam, Alfred C.
Lowenfeld, Percy F.
Lowenkron, Henry
Lowy, Victor
Luchs, Aaron
Luciano, Frank
Luloff, Nathan
Lynn, Isidore
McCarthy, Ambrose A.
McCullough, John
McGeough, Joseph F.
McPherson, Simeon
McTague, Lawrence J.
Macormac, Alfred R.

Mage, Myron
Maibrun, Edwin D.
Maida, Josephine
Makler, Edgar
Malcy, Louis
Mandel, Isidore
Mandel, Nathan
Manfredo, Ernest J.
Marchelos, Stelios
Marcus, Lillie
Marek, George
Margulies, Harry P.
Marinoff, Ben B.
Mark, Morris
Markel, Emanuel
Markowitz, Harry
Maser, Roland
Mash, Dora
Massey, Richard
Math, Jack
Mayer, Arthur
Mayer, Henry
Mazor, Kalman
Mealka, Edna Irene
Mehlman, Jonas
Melendez, Christobal V.
Mellinger, May
Melvin, John
Merber, Benjamin
Messineo, John W.
Michelson, Alice M.
Michnick, Louis S.
Mihalitsis, Athans
Miklowitz, Augusta D.
Milikow, David L.
Millstone, Sarah
Minarik, Mary
Mina, Gonzalo A.
Mins, Helen Ann
Minton, Arthur
Mischel, Samuel
Moesch, Elizabeth
Monaghan, Thomas A.
Moroshan, Alec
Morrison, Royal L.
Moses, Hers
Mufarrij, Abdullah
Muller, Otto
Muraskin, Israel H.
Murphy, Ambrose B.
Murphy, May
Murphy, Timothy F.
Nackmanovici, Clara
Nadel, Joseph
Nathanson, Frances B.
Needman, Mollie
Neufeld, Isidor
Neuman, Mortimer
Neuman, Ralph
Nocerino, Rudolph
Northdup, Lloyd A.
Oachs, Milford
O'Connell, Daniel T.
O'Connor, Mary A.
O'Grodnick, Irving
Ohlbaum, Richard
Ohsol, Johann G.
Okun, Rae
O'Malley, Thomas J.
O'Neill, James F. X.
Ornstein, Rebecca
Osofsky, Abraham
Ossipoff, Simon
O'Sullivan, Dennis
Pacello, Nicholas E.
Padilla, Caserio
Peppis, George Earl
Perlin, Henry
Phillips, Edward
Picheny, Bernard
Pike, William W.
Pineles, Jacob
Pisman, Ida B.
Pitrot, Adrian R.
Plachta, Aaron
Port, Herbert
Press, Moses L.
Price, Cyril
Pritika, Morris
Prostkoff, Simon
Rabiner, Harry
Rabinovitz, Leib
Radish, Celia
Rashkover, Abraham
Reddy, Raymond J.
Reed, Geo. Washington
Reibel, Jacob
Reich, Bernard
Reich, Sidney
Reinhart, Sidney
Reiss, Edward
Resler, Walter H.
Rogan, John J.
Rollin, Clara
Roman, Jerome
Root, Nathan
Rose, William
Rosen, Shera
Rosenberg, Daniel
Rosenberg, Emile
Rosenberg, Fred
Rosenberg, Israel M.
Rosenberg, Morris
Rosenblum, Anna
Rosenblum, Julius M.
Rosenfeld, Seymour M.
Rosenman, Elias B.
Rosenson, Sophy
Rosenstein, Abraham
Ross, Samuel
Rothberg, Babette
Rothfeld, Joseph
Rothman, Charles
Rothman, Sarah
Rothstein, Solomon
Rubin, Celia
Rubin, David H.
Rubin, Florence
Rubin, Yette
Ruby, Aaron
Rudel, Leo
Rudick, Abraham
Ryan, Mary C.
Sacia, C. Fred
Sack, Hyman
Safron, Sadie
Sagerman, Isidore
Sahud, David
Salinger, David
Salmone, Walter
Salomon, Isidore
Sandham, Regina
Santacroce, Charles
Santasiere, A. Edward
Sax, Benjamin J.
Saxon, Harry
Schaff, Sophia
Schaffer, Dorothy
Schapiro, Yuda
Scheer, Harry
Scheinerman, Max
Scher, David E.
Scherer, Philip
Scheuer, Sidney F.
Schiffer, Ladislaw
Schmidt, Gustave
Schneider, Abraham
Schneider, Edith
Schneider, Morris
Schoelt, Abraham H.
Schonhorn, Isak Moses
Schultz, David
Schultz, Joseph
Schuman, Herman
Schuman, Pincus P.
Schutz, Norman
Schwartz, Jennie
Schwartz, Julius
Schwartz, Louis
Schwarz, Samuel
See, Herbert F.
Segal, Juda J.
Semmel, Solomon
Sendroy, Julius
Serman, Rose
Shaffer, Irvin C.
Shannon, Wm. F., Jr.,

Shapiro, Harry
Sheehan, Daniel J.
Sheer, Matilda
Sheinberg, Leah
Shepard, Marshall L.
Shordiche, Ethel M.
Sicherman, Regina
Siegel, David S.
Siegal, Mandel
Silberg, Benjamin
Silberstein, Alexander
Silver, Samuel
Silverman, Isidore J.
Singer, Emil
Singer, Morris
Sipilesko, Nathaniel
Siragusa, Josephine
Sklaire, David
Slatin, Jacob
Slatzin, Frances R.
Slavik, Charles F.
Smith, Abraham
Smith, Lavinia Dorothy
Sobel, Isidore
Soibelman, Norman
Solomon, Herman
Solomon, Morris
Sommer, Ira
Soo-Hoo, Check-Mo
Spencer, Cuthbert
Springer, J. Arthur
Springer, Maurice
Stein, Nathan
Steinbock, Morris M.
Steinholtz, Samuel
Stenbuck, Frederick A.
Stephen, Nesib
Stern, Harry
Stern, Nicholas
Sternbach, Joseph
Sternberg, Matthias S.
Stirnweis, John A.
Storch, Solomon
Strom, Harry
Suda, Charles
Sugarman, Elias E.
Sugarman, Isaac
Suskin, Samuel
Swiebach, Arthur
Swinkin, Samuel
Tack, Meyer
Taglialatela, Pasquale
Tannenbaum, Israel
Taub, Samuel
Teichberg, Max
Thor, Frederick Arnold
Thorn, Sanford
Thornton, John J.
Thron, Anna
Thron, Mary
Tiber, Arthur
Tiber, Julius A.
Toepfer, David
Toole, William C.
Torashansky, Hyman
Tortorello, Frank
Treitler, Morris
Trigger, Raymond
Tucker, Louis
Tunis, Philip
Tzvetkopf, Nenko
Unger, Israel S.
Valensi, Edward W.
VanDeusen, Herman T.
Veno, Joseph A.
Veve-Santiago, John
Vilkomerson, Benjamin
Vogel, Armin C.
Von Bonim, Albert
Von Buehren, Alfred R.
Voorhees, Nelson A.
Wacher, Leonard
Wachsberger, Helen
Wagner, Theodore
Wald, David
Wald, Louis
Wallach, Samuel
Washington, E. T.
Waterman, Herbert
Wattenberg, Juda
Weidenfeld, Saul
Weidman, Richard
Weinberg, Charles
Weinberg, Jacob
Weinstein, Joseph
Weinstein, Marcus J.
Weinstein, S. J.
Weir, Paul Goddard
Weisberg, Rachel
Weiser, Rebecca
Weiss, Adolph
Weissenstein, Henry
Weitzman, Yetta
Welch, Maxwell J.
Wendrow, Esther
Wexler, Isidor
White, John Joseph
Wieder, Jacob
Wilder, Leona
Wilensky, Max
Wilwowsky, Haskell
Wimberly, Rufus E.
Witkin, Ruth M.
Wiwak, Max S.
Woods, Charles Alan
Wunsch, Samuel
Young, Martin H.
Zierler, Henry
Zimmerman, Helen S.
Zimmerman, Louis
Zimmerman, Nettie
Ziprin, Joel
Zloczower, Isaac
Zmora, Joseph
Zwick, Benjamin

School of Technology

Davis, William
Kinmeth, Geo. J. C.
Somlo, Henry

School of Business and Civic Administration

Davis, Solomon
Dury Walden
Febricant, Louis I.
Fishkin, Joseph
Gaudiosi, Pasquale
Glagovsky, Sylvia G.
Grabois, Sophia H.
Kaufer, Max
Kornitzky, Rose
Lind, Eli L.
Reisman, Louis
Richel, Charles
Saxe, Alfred
Schildkraut, Leopold
Singer, Benjamin
Stein, S. Melvin
Voigt, Frederick J.
Wales, Catherine A.
Weil, Monroe

School of Education

Bryant, Edna M.
Edelmuth, Florence
French, Harold
Kaplan, Isabel
Kean, Frederic Z.
Kraus, Lena
Long, Helen
Meyer, Henrietta
Simermeyer, Harry
Wollrab, Henry Chas.

COMMERCE BUILDING

School of Business and Civic Administration

Abbondolo, Daniel A.
Aberson, Mark
Abramovici, Moise
Abramovitz, Robert
Agell, John
Alinekoff, Morris
Allstrom, Frank Condit
Alperstein, Louis B.
Alpert, Henry
Alpert, Isidore
Altman, Ruth S.
Altschuler, Frank
Amchin, Maurice
Amerman, Meyer
Anchin, Max
Anik, Herman M.
Antell, Morris
Antovil, Harold
Appel, Louis T.
Arje, Max
Armstrong, Martin
Arnold, Frank
Aronoff, Jacob N.
Aronowitz, Nat
Aronowitz, Samuel
Asher, Irving
Asherman, Isidore
Astro, Isidore
Atkins, David
Auslander Sidney
Axelrod, Benj. M.
Badian, Samuel
Baker, Emile
Ball, William
Balman, Alexander P.
Band, Alvin
Barasch, William
Barnett, Nathan
Baron, Henry A.
Baron, William
Barshay, Reuben T.
Barzily, Harry A.
Batchker, Benj. H.
Baum, Edward Lincoln
Baumgarten, Samuel
Beiser, Abraham B.
Bell, Leonard
Bengal, Morris
Berger, Tobias
Berenback, Samuel
Berkowitz, Morris
Berland, Max
Berliner, Eli
Berman, Charles
Berman, Solomon
Bernitz, David
Berson, Charles
Best, Walter
Bialkin, Sam
Bilipinsky, Max
Biller, Osias
Birnbaum, David
Bleicher, Etta
Bleifeld, Solomon
Bliss, Noel George
Block, Max
Bloomgarden, Celia
Blum, Irving
Blumberg, Gustave
Blumenkrantz, D. H.
Bokal, Samuel
Bologh, Louis
Borodkin, Abraham
Boroff, Harry
Borowitz, Wolf
Braverman, Jacob J.
Brenner, Maxwell
Brier, Samuel
Brill, Rudolph
Brimberg, Simon
Brodsky, Hyman
Bronznick, Geo.
Broslau, Solomon
Bruckner, Louis
Budner, David L.
Burrell, Nathaniel, Jr.
Burstein, Louis A.
Cader, Samuel A.
Calcavecchia, Benedict
Calogero, Thomas
Cameron, James K.
Carlin, Benjamin
Cavanaugh, Edw. J.
Chait, Sara
Chapin, Evans
Charney, Max
Chavias, Mollie
Chodolofsky, Mitchel
Cohan, Harry Aaron
Cohen, Abraham
Cohen, Albert
Cohen, Arthur I.
Cohen, Benjamin
Cohen, Charles
Cohen, Isaac
Cohen, Jacob
Cohen, Louis
Cohen, Mathilde
Cohen, Michael
Cohen, Morris
Cohen, Morris L.
Cohen, Samuel P.
Colgan, Joseph C.
Conarck, Albert M.
Connor, Walter L.
Cooperstein, Hyman H.
Creamer, Maurice
Cusumano, Chas. L.
Cutler, Rebecca
Dalheim, Alvin
Daniels, Jacob
Dank, Paul
Darida, Paul
David, Harry Seton
Deckelman, Isador
Defren, Frank F.
De Maria, Anna
Detzkowsky, Jacob
Deutchman, Julius
Deutsch, Mortimer H.
Diamond, Hyman
Distelfeld, Cypra
Dollinger, Murray
Doman, Leon H.
Dorn, Augusta
Dresner, Seymour
Driscoll, Joseph A.
Druck, Charles
Drucker, Milton
Dunn, Frank A.
Duskis, Reuben
Eaton, James H.
Edelman, Chester M.
Egipto, Dionisio A.
Ehrenreich, Francis
Ehrlich, Isidore
Eisen, Arthur Z.

Eisenberg, David
Elefant, Samuel
Eletz, Abraham
Elias, Anna
Emmer, Jack
Engel, Morris A.
Epstein, Abraham
Esray, Helen Eldridge
Faber, Nathan Louis
Farbman, Samuel
Fava, Edward
Febricant, Louis I.
Feder, Morris
Feigenbaum, Frank
Feinberg, Nathan C.
Feinberg, Albert
Feinglass, Fred A.
Feinglass, Nessie
Feinman, Morris D.
Feinstein, Louis
Feit, Jacob
Feit, Louis
Felcher, Isidore
Feldman, Samuel
Feleppa, Ernesto
Feltman, Jack
Finkel, Benj.
Finkelstein, Moe
Finney, Edward Frank
Fischbein, David H.
Fischbein, Moses R.
Fischer, Anton
Fischer, Otto
Fisher, George
Fischman, Sidney
Fitzgerald, Kathleen
Fitzsimmons, Thomas A.
Flansbaum, Herman
Fleck, Joseph
Fliegel, Edith I.
Flinker, Harry
Forman, Reuben
Fox, George S.
Foxtow, Louis G.
Frank, Irene M.
Frank, Jacob
Frankel, Sidney
Freed, Gustave
Freedenberg, George
Freedman, Alex. M.
Freedman, Bernard
Freid, Chas.
Fried, Joseph
Friedman, Abraham
Friedman, Jacob
Friedman, Max, 201 Allen St.
Friedman, Max, 747 Blake Ave., Brooklyn
Friedman, Samuel
Friedman, Sidney
Fulcher, John
Furman, Aaron
Gaba, Anna
Gabor, Louis
Galitzer, Morris
Galitzer, Philip
Gartenlaub, Rudolph
Gelb, Solomon
Gelb, Jacob
Geller, Philip
Gelman, Sollie
Genzer, Jay
Gershon, Nathan W.
Geshwind, Flora
Gewelbe, Minnie
Giangrasso, Joseph
Gilormini, Louis A.
Ginsberg, Oscar
Gingold, Sidney
Glasner, Harry
Godt, Morris
Gold, Harry
Goldberg, Abraham I.
Goldberg, Henry J.
Goldberg, Victor
Goldman, Dinah
Goldman, Mary
Goldman, Max
Goldman, Reuben
Goldman, Samuel N.
Goldstein, Abraham
Goldstein, David S.
Goldstein, George
Goldstein, Leo L.
Goldstein, Moses
Goldstein, Nathan
Goldwasser, Samuel
Goldwater, Abraham
Golub, Abraham
Gonzalez, Frank
Goodman, Jacob
Goodman, Sylvia
Gordon, Victor
Gotthelf, Abraham J.
Gotthilf, Maurice
Gottlieb, David
Gottlieb, Samuel
Gould, Frank J.
Govil, Hari G.
Graff, Louis
Granowitz, Jacob
Greenbaum, Harry
Greenbaum, Max A.
Greenberg, Aaron
Greenberg, Benj.
Greenberg, Israel
Greene, Thomas
Greenfield, David
Greenspan, Morris
Greif, Saul M.
Greilsheimer, Jerome J.
Gross, Benjamin
Gross, Fannie
Grossman, Boris
Grossman, Nathan
Grouf, Meyer
Gruberg, Samuel
Grubman, Samuel
Gudat, John Fred
Gurma, Ruby L.
Gutradt, Louis
Haber Hyman
Hauptman, Irving
Heep Richard H.
Heger, Charles
Heller, Deborah
Heller Eleazer L.
Heller, Jos.
Heller, Morris S.
Heller, Samuel
Hellinger, Anna
Helmer, Alf S. H.
Hepensteil, Charles
Herman, Joseph
Hershowitz, Louis
Herskowitz, Samuel
Herzfeld, Saul
Hilko, Michael
Himmelstein, Harry
Hinton, Francis B.
Hirshkowitz, Sol
Hoberman, Louis G.
Hoffman, Jacob M.
Hollander, Sam
Holler, Philip
Horowitz, David
Horowitz, Leo
Hueber, Harry
Hugly, Henry
Hirsch, Lottie
Hutt, Joe
Hyman, Jos.
Imperial, Benedicto M.
Import, Samuel
Infeld, Milton Wm.
Ingman, Otto Harold
Inselberg, Isidore
Irgang, Carl
Isaacs, Murray Robert
Isaacson, Abr. C.
Israel, David
Jackson, Wm. H.
Jacobs, Joseph
Jacobs, Matthew
Jacobs, Pincus P.
Jacobs, Ralph M.

Jaffe, Morris
Jankowitz, Abraham
Jassen, Leo
Jauck, Robert A.
Josephic, Ben
Kachansky, Samuel
Kahane, Leo
Kahn, Ralph
Kahn, Samuel
Kaiser, Joseph
Kamenetsky, Harry
Kaminsky, Simon
Kanowsky, Sam
Kaplan, Harry A.
Kaplan, Lester
Kaplowitz, Hyman
Karmel, Edward
Kasak, Leo
Kasanof, Leo
Kasof, Murray
Kass, Abraham
Kassenbrock, Alonzo J.
Kassin, Charles H.
Katz, Abraham M.
Katz, Alexander G.
Katz, Casper
Katzenellenbogen, N. M.
Katznelson, Harry
Kaufman, Samuel W.
Keckeley, Alwyn B.
Kehoe, Arthur
Keller, Arthur
Keller, Julian
Kelly, Geo. S.
Kelter, Harry
Kerestesy, Katherine
Kessler, Paul
Kessock, Joseph
King, Fred D.
Kingston, Samuel C.
Kisver, Harry
Kivowitz, Moses
Klein, Abraham S.
Klein, Bernard
Klein, Dave
Klein, David Daniel
Klein, David S.
Klein, Emanuel
Klein, Jacob
Klein, Samuel
Klein, Walter
Kloisner, Morris
Kneip, Herman
Knoepfel, Frank, Jr.
Koch, Herman
Koffler, Evelyn
Kohn, Albert
Kohn, Harry
Kolodny, J. M.
Koppisch, Edward
Korman, Abraham
Korn, Bernhard
Krakower, Harry
Krakower, Matthew
Krakowsky, Wm. H.
Kramer, David
Kramer, Jerome
Krasawitz, Sol
Krautstuck, Izrael
Kreines, Hyman
Kreigel, Ida
Kronrot, Jacob
Kruger, Charles
Kulok, Sidney
Kuntz, Abraham
Kurman, Max
Kutcher, Joseph
Kutcher, Nathan
Kutlowitz, Morris
Landa, Frank
Landa, Morton
Landes, Sidney H.
Lang, Samuel
Lavery, John M.
Leach, Rossman D.
Leavitt, Albert N.
Lederman, Elizabeth
Lefkowitz, Isidore
Leibowitz, Harry
Leibovitz, Michael
Leinkram, Nathan
Lenoff, Samuel
Leon, Jerome E.
Lerner, Harry A.
Lertas, James
Letefsky, Herman
Levin, Isadore
Levin, Sol
Levine, Alfred E.
Levine, Benjamin
Levine, Irving
Levinger, Louis Mano
Levitas, Benjamin
Levy, Abraham Ross
Levy, Barry A.
Levy, Jacob
Levy, Joseph
Levy, Louis C.
Lewis, Merwin
Licht, Emanuel
Lichtenstein, Sidney
Liebrader, Solomon
Lifschitz, Louis
Liggio, Vincent
Linder, Ida
Lindner, Oscar
Lindermann, Hyman
Lipeles, Eli
Lipkowitz, Rose
Lipschutz, Meyer
Lipschitz, Leo
Lipson, Harry George
Litmanowitz, S. Victor
Livant, Louis
Loebel, Myer
Loewentheil, Albert
Loketz, David
Lovaglio, Salvatore
Lovisch, Sidney Alfred
McGowan, Harold
McArdle, Bernard F.
McQuade, Peter
Mabakiao, Vincente
Macormac, Alfred R.
Mager, Julius
Magram, Louis
Magruder, Ott R.
Mahler, Alexander
Mahler, Joseph
Maida, Josephine
Malbin, William
Mand, Harry
Mandel, Edward
Mandel, Louis
Marcus, Hyman
Marici, Vincent Chas.
Maroulis, Anthony
Marx, George, Jr.
May, Alexander
Meisner, Samuel
Meister, Elias A.
Menaker, Abraham
Mendez, Thomas
Mendlowitz, Emanuel
Mendlowitz, Joseph
Mendlowitz, Sol
Mermelstein, Benjamin
Meyer, Abraham Fred
Meyerson, Ellis J.
Miller, Benjamin
Miller, Bernard
Miller, Irving
Miller, Jack L.
Miller, Paul K.
Miller, Philip
Miller, Rachel Ida
Miller, Rebecca
Millstein, Lillian
Minenberg, Samuel
Mintzer, Milton
Mirski, Alter
Mitrani, Maurice
Mitzner, Isidore
Moglin, Samuel A.
Molnar, Paul Joseph
Morowitz, Benjamin
Moritz, Sidney

Moskowitz, Morris
Mulligan, Henry A.
Mulligan, John D.
Naftal, Sadie
Narins, Arthur
Natelson, Herman
Natelson, Morris
Needle, Harry
Nelson, Ben.
Neuman, Sydney
Neuwirth, Benjamin
Newman, Harold
Newman, Meyer
Newman, Nathan
Nisnewitz, Louis
Oberlander, Samuel
Oca, Gregorio R.
Odell, Aaron
Offenberg, Benjamin
Oliver, Israel
Ordansky, Ellis
Oremland, Morris
Orenstein, Charles
Ostrow, Meyer
Paiewsky, Harry
Passman, Martin E.
Passoff, Harry A.
Paul, Samuel W.
Paulson, Jacob G.
Pearl, Bernhard
Pearlman, Harry
Pech, Irwin P.
Perangelo, Angelo
Perlis, Harris
Perles, Nathan
Perlman, Nathan
Perlstein, Joseph
Pers, Celia
Petshersky, Salamon
Petter, Elias
Pfretzschner, Alfred
Phillips, S. Ackerman
Pine, Moses L.
Piston, Hyman
Pitkin, Frank
Plapinger, David
Plotkin, Abraham
Pokard, Jacob
Polk, Irving
Portnoy, Isidor
Portnoy, Sophie
Posner, Sara
Posnick, Rebecca
Potash, Marvin
Prager, Charles
Preiser, Theodore H.
Prensky, Harry
Probitsky, Morris
Prusin, Carl S.
Pruzan, Isidore
Putterman, Tillie
Rabinowitz, Harry
Racow, Sophie
Rakov, Caleb
Rapps, Samuel M.
Rashid, Mohammad
Raskin, Harry
Reich, Anna
Reich, Benjamin
Reilly, Edward J
Reiner, Carl
Reitmeister, Morris G.
Resnick, Robert
Resnick, Sol
Reynolds, Daniel P.
Reynolds, Francis A.
Ricco, Peter F.
Rickover, David J.
Rieger, Jos. M.
Rimerman, Samuel D.
Robben, Herman
Robben, John
Roberman, Joseph
Robinson, George
Rochman, Aaron Louis
Ronald, Wm. H., Jr.
Rosen, Naomi
Rosenband, Nathan
Rosenbaum, Benjamin
Rosenbaum, Hyman
Rosenbaum, Joseph
Rosenberg, Anna
Rosenberg, Hyman D.
Rosenberg, Milton
Rosenblatt, Matilda
Rosenthal, Harold
Rosenthal, Sara
Rosenzweig, Isador A.
Rosing, Nehemiah
Rosner, Moe
Ross, Reuben
Rothberg, Fannie
Rothenberg, Louis I.
Rothstein, Nathan
Rothstein, Solomon
Rotter, Morris
Rubaum, Morris
Rubin, Abraham
Rubin, Eli
Rubin, Florence
Rubin, Harry
Rubin, Julius
Rubinson, Moses
Ruderfer, Rose
Rudman, Morris
Ruth, Isidor
Ruthoser, Harry J.
Sadagursky, Charles
Sader, Samuel
Sakol, Henry
Samilson, Frances
Sandler, Benjamin
Sandry, Solomon
Saxe, Emanuel
Scalice, Peter S.
Schanz, Elisabeth C.
Schatten, Saul
Schechtman, Philip
Scheer, Lester
Schein, Anna
Scherago, Jacob
Schick, Lester
Schiff, Lieber
Schneider, Solomon
Schneiderman, Geo. H.
Schochet, Abraham
Schoenberg, Maurice
Schrager, William
Schulder, Jacob
Schur, George
Schuster, Louis
Schwartz, Abraham
Schwartz, Sam
Schwarzbach, Joseph
Sedacca, Albert
Seigerman, Henrietta
Seigerman, Morris
Selmanowitz, Fannie
Senft, Israel Hirsch
Settle, Aaron
Shapiro, Aaron
Shapiro, Arnold H.
Shapiro, Harry
Shapiro, Hilda
Shapiro, Julius U.
Shapiro, Maurice
Shaps, Philip
Shatsky, Morris
Shear, Louis
Sherman, Earl
Sherman, Isaac
Siegel, Abraham
Siegel, Joseph
Sikowitz, Isidore
Silber, Yvette
Silbermuntz, Samuel
Silbert, Herman
Silver, Abraham
Silverman, Aaron
Silverman, Bernard
Silverstein, Max
Silvestro, Louis F.
Simon, Joseph
Skal, Raphael J.
Smith, Charles
Snyder, Benjamin

Sobel, Julius
Socolof, David
Sohn, Louis H.
Solomon, Albert
Solomon, Barnet
Solow, Ralph J.
Som, Apurva K.
Somers, Benjamin
Spector, Louis
Spigel, Harold
Spindle, Pincus
Spiner, Henry H.
Springer, Harold
Springer, Harry A.
Stegloff, Isidor
Stein, Morris M.
Steinberg, Jack
Steinberg, Max
Stern, David
Stern, Elizabeth
Stern, Irving
Sternfeld, Max
Sterrn, Joseph
Steyn, Harry
Stoliar, Elias
Stoller, Philip
Streep, Anita
Strum, Esther
Stuckgold, Samuel
Sturman, Louis
Sultan, Philip
Sussfeld, George
Sussman, Benj.
Sussman, Martin
Switsky, Samuel
Sydelman, Israel
Symon, Sarah R.
Tadden, Florence
Tarlow, David
Tepper, Rebecca
Thousenfriend, J. R.
Tischgal, Elias
Tobias, Abraham
Trinidad, Clemente T.
Trompeter, Sarah
Troskin, Sadie
Tunick, Stanley B.
Turits, Leonard E.
Uhrbach, Arthur
Umschweif, Isidore M.
Unz, Adolph
Varnuska, Emil J.
Vigdor, Philip
Vignola, Louis
Viscardi, Anthony F.
Waldman, Meyer
Wales, Catherine A.
Walsh, Joseph A.
Ward, James Edward
Warshawsky, Abr. A.
Wasserman, Herman L.
Wasserman, Morris J.
Waxman, Isaac
Weidenfeld, Benjamin
Weinberger, Emanuel
Weinberger, Harry
Weinstein, Abraham
Weinstein, Hirsch
Weinstein, Jerome
Weinstein, Morris
Weinstein, Samuel
Weinstein, Sarah
Weinstock, Nathan
Weintraub, Jacob
Weintraub, Julius
Weinzweig, Jacob
Weisbrod, George
Weisman, Joseph
Weiss, Bernard
Weissman, Mollie
Weitz, Henry
Welkes, Samuel L.
Welti, A. L.
Werden, Jesse
Wertheimer, Irving
Widom, Harry
Wien, Louis
Wilt, Samuel J.
Wisooker, Hyman
Wolf, Jos. B.
Wolf, Solomon
Wolfensohn, Samuel
Wolff, Saula Zola
Wolhorn, Herman
Wolosoff, Abraham
Wurman, Joseph
Yamin, Samuel
Yaremenko, Alexander
Yaswen, Henry
Youdelman, Elsie
Youngwood, Joseph
Yukow, Samuel
Zackim, Israel
Zeitlin, Marc
Zide, Rose
Zito, Francis R.
Zlot, Maurice E.
Zucker, Abraham H.
Zucker, Reuben
Zuckerman, Max H.
Zudeck, Maurice
Zukernick, Henry

MUNICIPAL BUILDING

School of Business and Civic Administration

Byrne, Loretta A.
Gratjan, Abcetine
Krasnoff, Samuel
Malce, Martha
Natelson, Morris
Philipson, Robert A.

BROOKLYN BRANCH

College of Liberal Arts and Science

Aaronson, Samuel
Abrams, Max
Ageloff, Lillian E.
Alkow, Jacob M.
Allison, Bernard
Alt, William
Anderson, Edith F.
Anderson, Helen R.
Andries, George
Apelzin, Rosalie
Appel, Meyer
Appleby, Anne
Appleman, Morris
Arkowitz, Beatrice
Armstrong, Adelaide
Aronoff, Meriam
Aronstam, Rosalind
Arum, Lillian
Avrutis, Clara
Axell, Joe
Badler, Abraham
Bagatell, Samuel
Bass, Harold
Bass, Jacob
Baurle, Christine F.
Becker, Sadie
Beckett, Mary L.

Behrman, Felicia
Bender, Ida H.
Benov, Paul
Berger, Julius
Berkowitz, Max
Berman, William
Bernstein, Abraham
Bernstein, Jacob
Bikoff, Jonas
Blaker, Fannie
Blaker, Pauline
Bloomgarden, Celia
Boll, Arthur
Borsuk, Rose
Bradie, Saul
Brady, Anna
Brady, Catherine
Bronstein, Lillian
Brook, Benjamin
Browne, Elizabeth
Bryant, Marie
Bunzelman, Cleia
Buxbaum, Leonard
Byrne, Julia
Candela, Anita C.
Caplowitz, Murray
Caporell, Joseph
Carr, Mary
Carway, Francis
Cavo, Lawrence A.
Cheifets, Lucernne
Clarke, Mary F.
Cohen, Adelaide F.
Cohen, Anna
Cohen, Fannie
Cohen, George
Cohen, Jennie
Cohen, Martha
Cohen, Ruth A.
Collins, Helen
Conlin, Muriel
Connelly, Irene
Conovitz, Kate
Corsum, Reta
Crocker, Frances
Cummings, E. Mabel
Danziger, Sidney
Deutsch, David
Deutsch, Nettie
Dickman, Emily
Dodds, Martha
Dogin, Louis
Dorfman, Rose
Dornholz, Lillian
Dowd, Priscilla
Downing, John
Droesch, Mary J.
Duffy, Augusta
Echental, Solomon
Ehrlich, Louis
Eisler, Abraham
Ellis, Charlotte
Ellis, Raymond C.
Engel, Siegfried
Engler, William
Epstein, Frieda
Ernest, Melita
Fainland, Rebecca
Falke, Elizabeth L.
Fanning, Adelaide
Fanning, Helen F.
Fankuchen, Isidor
Feigenbaum, Samuel
Feinman, Jacob
Feit, Louis
Feldman, Anna
Feldman, Rebecca
Failkoff, Abraham
Finch, Elsie
Fine, Freda
Fisher, Rebecca
Fitzgerald, Margaret
Fittin, Gertrude E.
Fluker, Blanche
Flemming, Mary L.
Fleishman, Herman
Fliegel, Elsie
Fogler, Sigmund
Foley, Katherine
Forschmidt, Rachmiel
Frank, Esther
Freund, Minerva
Fried, Esther
Friedlander, Anna
Friedman, Dorothy
Friedman, Gerson
Friedman, Golda L.
Friedman, Mildred
Frost, Robert
Fruhan, William
Gainso, Beatrice
Gannon, Edmund
Gast, Esther
Gaynor, Stephen A.
Ger, Moe
Gerber, Esther
Gernstenfeld, Pearl
Geller, Bella
Ginsberg, Harvey
Goldie, May
Goldfarb, Anna
Goldfine, Mary
Goldschlager, Bernhard
Goldschlager, Frances
Goldsmith, Ruth L.
Goldstein, Irma L.
Goldstein, Morris
Golowenchick, Harry
Golub, Jacob
Gombert, Victoria
Goodman, Estelle
Goodman, Samuel
Goorian, Barnett
Gottesman, Harvey
Grayzel, Rose
Greenbaum, Hyman
Greenberg, Charles
Greenfield, Edna
Greenwald, Louis
Greenwald, Sadie
Gross, Miriam
Gross, Sadie
Grossman, Lester E.
Grover, Eva
Guenther, Grethe
Grundel, Wilhelmina
Haber, Celia
Hach, Pauline
Hallahan, May A.
Halperin, Anna
Halperin, Morris
Hamilton, Jennie M.
Handler, Leslie
Handwerker, Bernhard
Harrington, Eleanor
Harris, Dorothy
Harris, Frieda
Harrison, Anna
Hartman, Isadore
Haubenstock, Celia
Hamsberg, Marion
Hayes, Joseph J.
Haynes, Mary T.
Heinbockel, Anna
Heitner, Sara
Heller, Deborah
Heller, Joseph
Henderson, Helen M.
Heisler, Daniel
Herman, Jacob
Herr, Malcolm
Hershar, Rose
Hoerig, Lillie
Hoffman, Edward J.
Howell, C. Garfield
Huberty, Agnes
Hughes, Rose
Humbert, Gertrude
Hunt, Harold
Hurley, Catherine
Isaacson, Abraham C.
Janofsky, Jacob
Jasper, Hyman
Jones, Agnes
Jones, Mabel
Juro, Samuel
Kaftel, Marie

Kane, Alice L.
Kalisher, Henry
Kalina, Rose
Kaneik, Max
Kapelman, George
Kaplan, Jeanette
Kaplan, Ray
Karchensky, Morris
Katz, Augusta
Katz, Blanche
Katzoff, Joseph
Keckley, Alwyn
Keleher, Adelaide
Kelly, Martin J., Jr.
Kenney, Marie
Kerz, Benjamin
Kestenbaum, Frances
Keyes, Marie M.
Kimball, Eva M.
King, Mary A.
Kirley, Reta
Kerman, Ida
Kirschner, Bertha
Kissen, Jeanne
Klausen, Edna
Kletsky, Sadie
Klevins, Ethel
Knabenhoff, Morris
Knabenhoff, Rebecca
Kohn, Morris
Kornhauser, Edward
Krokow, Saul
Krasnow, Bessie
Krasnansky, Rose
Kreines, Abraham
Kristoffersen, Gunvor
Kroehle, William
Krueger, Alma M.
Krupetsky, Etta
Kuhn, Helen
Kunick, Genevieve
Kuttin, Sidney
L'Allamand, Marie
LaGreca, Anthony
Lapovsky, Benj. L.
Laun, Louise
Launer, Harry
Laxer, Jane A.
Leavitt, Abbey M.
LeShufy, Lillian
Levin, Rae
Levine, Anne
Levine, Philip
Levine, Sarah
Levinsohn, Bernard
Leschinsky, Sarah
Leahy, May
Leahy, William
Lebofsky, Irving
Lebow, Victor
Lebowsky, Abraham
Legunsky, Bernard
Lepowsky, Edward
Lepowsky, Martha
Levi, Joseph
Lehman, Mary
Levinson, Henriette
Levitsky, Benjamin
Levitsky, Eva
Levitt, Anna
Levy, Henry
Levy, Isidore
Levy, Rose
Liebowitz, Joseph
Lifton, Leonard
Lind, David
Liftchild, Doris
Lifschitz, Samuel
Lindenbau, Esther
Lippman, Dina
Livingstin, Adele M.
Loretz, Francis X.
Lorentz, Irene E.
Longhra, John F.
Lubelsky, Benjamin
McCarthy, Ambrose
McCarthy, Frances
McCarthy, Lois L.
McCullough, Rose A.
McCullough, Thomas
McDonald, Roger A.
McDorman, Herbert
McDuffee, Clare H.
McGinty, Josephine
McGuire, James
McGivney, Frank
McKenna, Alice
McKenna, Edith
McKenna, Marion
McLaughlin, Josephine
McNeill, Mariana
McSharry, Mary
Machinson, David
Maguire, Letitia
Maloff, Sidney
Mandracchia, Joseph
Mann, Charles
Marone, Clement
Marcus, Harry
Matschke, Griffith
Matthey, Alice
May, Harriet
Mayer, Arthur
Meigs, Emily
Meiselman, Louis
Meltz, Minnie
Meltzer, David
Meltzer, Sophie
Meriendez, Elena M.
Merkle, Anna C.
Messeele, Amelia
Millet, Alan
Meyer, Walter T.
Milkowitz, Augusta
Milan, Reina D.
Milleman, Evelyn
Miller, Emma
Miller, Maurice
Miller, Minnie
Miller, Thomas G.
Miller, Alan
Moiel, Belle
Moir, Helen
Monahan, Helen
Mortenson, Helga R.
Moskowitz, Joseph
Moseley, Herbert
Muller, Arthur
Murphy, Daniel
Murphy, Mary E.
Murphy, May
Murphy, William A.
Myaskofsky, Anna
Nanke, Mary
Natelson, Herman
Natelson, Morris
Meyer, Harry
Nizin, Anna
Noyes, Samuel
O'Melia, Anna
O'Neill, Alice
O'Neill, Charles
Oransky, Harry
O'Connor, Mary V.
O'Donnell, Helen
Olsen, Ella
Ostrofsky, Harry
Overholser, Donald M.
Owens, Henry
Palevsky, Jessie
Paoli, Frank
Partridge, Edith
Peck, Irwin
Persky, Rubin
Peterson, Albert
Pickett, George
Petri, Lucie
Peddian, Lillian E.
Pincus, Rachael
Platter, Florence
Pollack, Leon
Porterfield, Frances
Prager, Charles
Price, Jacob
Printy, Lavinia
Raabin, Deborah
Rabinowitz, Max

Rang, Irving
Radtke, Erman M.
Rappaport, Morris
Raye, Clifford
Redhead, Edward
Rehfeldt, Sarah
Reich, Rae
Reiss, Pearl T.
Reitman, Harold
Rendell, Harriet
Reynolds, Gerard
Reynolds, Grace
Reynolds, Katherine
Richman, Leo
Rieger, Evelyn
Rivera, Cora M.
Rochlin, Esther
Roodman, Tillie
Rosenbaum, Flora
Rosenchild, Anna
Ross, Sadie
Roth, Henry
Rothberg, Al
Rothenberg, Samuel
Rothman, Charles
Rourke, Genevieve
Rubin, Moses
Rubman, Jacob
Ruprecht, Elizabeth
Sachen, Mary
Sacks, Anna
Sale, Max
Sandler, Leo
Schantz, Joseph
Schatz, Rae
Schaul, Herbert G.
Schiff, Francis
Schiffries, Rebecca
Schlossberg, Emil
Schnall, Sadie
Schnahett, Meyer
Schreiber, Sidney
Schnelling, Morris
Schultz, Helen
Schwartz, Jacob
Scklover, Sam
Seigerman, Henrietta
Shaffran, Max
Sheinmark, Ephraim
Shapiro, Charles H.
Shapiro, George
Shapiro, Irving
Shapiro, Newman
Shavelson, Katherine
Sherman, Anna
Sherman, Elsie K.
Sica, Joseph
Siegel, Rose
Siegel, Samuel
Silverman, Fanny
Silverstein, Nina
Simmons, Franklin
Simons, Mortimer
Simons, Susie
Sisewein, William
Skal, Raphael
Skulsky, Samuel
Slonim, Mildred
Smith, Mary E.
Smith, Russell
Solomon, Frieda
Solowzy, Fannie
Sorgen, Isaac
Spain, Stella
Stack, Max
Stafford, Ruth A.
Stark, Harry N.
Starowitz, Meyer
Starr, Benjamin
Stein, Barbara
Steinberg, Emma
Steinberg, Norman
Stenbuck, Frederick
Stephens, William
Stoller, Philip
Stoller, Philip
Stolowitz, Fannie
Strodler, Morris
Sullivan, Elizabeth
Summerfield, Ray
Surowitz, Esther
Taleisnik, Jennie E.
Taylor, Adelbert L.
Taylor, Marion A.
Teare, Edith
Tenzer, Samuel
Teommey, George
Thaw, Mary L.
Theilheimer, Theresa
Thomason, Layton
Topash, Anna
Trevor, Benjamin
Trynz, Frances
Tunney, Ethel
Uhrbach, Arthur
Van Cleave, Ruth
Vischof, Jeanette
Wagner, Hannah
Wolcott, Gladys
Walrond, Eric
Warren, Milton
Wasilewski, Stanley
Waters, Vincent P.
Waxman, Esther
Weber, Harry
Weil, Sidney P.
Weinberg, Alice
Weiner, Abraham
Weinstein, Irwin
Weinstein, Morris
Weinstein, Philip
Weintraub, Harry
Weintraub, Nettie
Weiser, Emma L.
Weitzman, Augusta
Wingett, Edward
Werbelowsky, Isidor
Werin, Abraham
Wiggins, Robert C.
Wilgus, Gladys
Wolfson, Regina
Wolfowitch, Celia
Wolfran, Helen O.
Woodyard, Horace
Zelekowsky, Dora
Zemlock, Abraham
Zemlock, Lillian
Zolotoroff, Morris
Zucker, Esther
Zuckerman, Rose

School of Business and Civic Administration

Ackerman, Max
Adams, Frank
Altman, Jerome
Barta, Dorothy
Barta, Gertrude
Bashkind, Eli A.
Berman, Hyman
Bernhardt, Maurice
Bogle, Francis
Brasaven, Belle
Brook, Nathan
Brown, Charles
Brown, Helen W.
Bruder, Joseph
Burger, Joseph
Byrnes, Myles
Carlin, Benjamin
Cohen, Jacob H.
Cohen, Morris Harry
Cohen, Philip
Copeland, Hugh
Cytron, May
Dickieson, Alton
Dworkin, Joseph
Eisenberg, Anne
Epstein, Kate
Epstein, Abraham

Fastofsky, Abraham
Fitzgerald, William A.
Friedman, Elsie
Friedman, Julius
Friedman, William
Genner, Louis
Geller, Ferdinand
Goldstein, Alex.
Grayer, Max
Halperin, Isabelle
Hartman, Morris
Hein, Hugo
Hershkowitz, William
Hildring, Thurston
Hirschewitz, Minnie
Horowitz, Helen
Hyman, Paul
Kimball, William
Kirshenbaum, Jacob
Krakower, Harry
Krause, Beatrice
Levine, Arthur
Lewis, Herman
Loftus, William L.
McDonnell, Roger A.
Miller, Alexander
Mozor, Max
Nachinson, David
Oransky, Louis
Pestanowitz, Anna
Rod, Robert L.
Rosenblum, David
Rosenblum, Morris
Rosenblum, Howard
Rosenblum, Julius
Rossbach, Harry
Rosenthal, Miriam
Rosenzweig, Harry
Rubin, Louis
Rubman, Jacob
Saltz, Frank
Scheinberg, Harry
Schlang, Jerome
Slupsky, Sadie
Schnall, Bella
Schwartz, Oscar
Shmuris, Ida
Silversmith, Julius
Simon, Herman
Simmons, Isidore
Soicher, Clara
Solomon, Bella
Soroko, Samuel
Sussman, Abraham
Sussman, Rose
Sutherland, Andrew
Swerse, Samuel
Tonne, Herbert
Trachtenberg, Joshua
Tragis, Mary
Treiman, Emily W.
Treppel, Abraham
Vesper, Joseph J.
Warchaizer, Isadore

MATRICULATED STUDENTS IN THE AFTERNOON DIVISION

SCHOOL OF EDUCATION

Candidates for the Degree of Bachelor of Science in Education

Aaronson, Edith
Aaronson, Mildred
Abernethy, Ada B.
Abramovitz, Ida
Accles, Elizabeth (Mrs.)
Adams, Florence A.
Adams, Mabel
Ahlers, Irmgard
Aldore, Mary
Adele, R. A. (Sister)
Allen, Ethel M.
Anderson, Hanna
Aronson, Lena
Atkins, Sophia C.
Attwater, Dorothy
Austera, Emma H.
Bacon, Eva Muriel
Bagley, Maurice A.
Bailey, Sara L.
Baris, Louise
Battaglia, Nina A.
Battin, Prudence
Beck, Marguerite T.
Berg, Bertha
Bermer, Charlotte
Bernstein, Isador
Bischof, George
Blume, Florence
Blusiewicz, Helen T.
Bowhm, Alfreda
Bold, Edna
Bolte, Elvina
Bonnick, Christopher R.
Bornitz, Marie
Bothner, Gunhilde
Bowman, Margaret
Boylan, Marie
Bradley, Marion
Bragaw, Edna
Branigan, Irene M.
Bresel, Lillian K.
Brennan, May C.
Brice, Agnes M.
Bridges, Percy
Briggs, Rita F.
Brittan, Adelaide
Browde, Charlotte
Brower, Edith M.
Brown, Madeleine V.
Brown, Samuel J.
Buccino, Madeline
Buckley, Maude M.
Buono, Mildred
Burke, Frances J.
Busch, Margaret A.
Buttan, Minnie
Buttaravoli, Lillian
Byrne, Mary B. C.
Caesar, Florence
Cahill, Amelia
Cain, John R.
Callahan, Janet V.
Callahan, Mary A.
Canale, Marie
Cappa, Madeline E.
Carlo, Elizabeth
Carroll, Catherine
Carroll, William
Cascio, Frances
Cashin, Joseph A.
Cassidy, Alice M.
Caveney, Mary T.
Cerulli, Carmela
Cerulli, Jennie
Chambers, Margaret
Charap, Anna
Cheney, Ruth B.
Chitraro, Dolores
Churchard, Gwendolyn
Ciervo, Celestina
Clarke, Agnes G.

Cline, Katherine
Cohen, Dinah Ernestine
Cohen, Martha
Cohen, Renée
Coleman, Ellen G.
Collord, Edith
Comeaux, Gladys
Conley, Mildred
Connor, Ellen F.
Cornell, Edith K.
Corney, Jane M.
Cosgrove, John J.
Cowley, Mary B.
Cross, Mary
Crowe, Ethel H.
Crowley, Elizabeth
Cullen, Helen
Cunningham, Mary A.
Cunningham, May T.
Curran, Marguerite
Dake, Viola M.
Dalberg, Anita S.
Davis, Eugenia V.
Day, Howard
De Caro, Gertrude A.
Delamere, Josephine M.
De La Vergne, Anne R.
Della-Chiesa, Louise T.
Denny, Amy J.
Dens, Lucille A.
Deutsch, Viola
Diehl, Ethel L.
Diehl, Miriam
Dillon, Mary F.
Dlugo, Ethel F. (Mrs.)
Donnelly, Katherine M.
Donohue, Marie
Dowd, Priscilla
Douglas, Susan
Downer, Flora H. D.
Doyle, Nora E.
Drennan, Eleanor
Downey, Helen
Driscoll, May
Drumm, Edith
Duffy, Mary Dolores
Dugan, Sadie M.
Duncker, Anna M.
Dunn, Mary R.
Dutweiler, Catherine
Eaton, Harriet
Eaton, Joseph
Edelmuth, Florence
Edinburgh, Rose
Elliott, Marion
Ellis, Catherine J.
England, Julia Maxwell
English, Mary G.
Eppenbach, Edwin G.
Ettensperger, Edna
Eyerman, Ruth P.
Falco, Teresa (Mrs.)
Falk, Dora
Fallon, Mary
Fanning, Mary
Farhas, Ella
Farrell, Martha
Faulkner, Cecilia F.
Feier, Florence W.
Feldman, Henry
Feldstein, Bertha M.
Feldstein, Nettie E.
Fischer, Charles G.
Fiore, Assunta
Fitzpatrick, Mabel
Fitzpatrick, Rosemary C.
Flood, Albert E.
Flora, Frank
Flynn, Marie E.
Foley, Mary S.
Folger, Anna
Folts, Lena
Foran, Josephine M.
Forrest, Noel J.
Foster, Marjorie M.
Fox, Carina
Freedman, Florence
Freedman, Mamie
Frick, Marie K.
Fried, Stella
Frisch, Florence
Frost, Celia
Gallagher, Agnes M.
Garity, Malcolm T.
Gaston, Mary C.
Gedeone, Anna
Gerathy, Mary C.
Gillen, Mary
Geiger, Edna R.
Glagan, Hortense
Goldfarb, Anna J.
Goldfarb, Rose
Goldie, May
Goodman, Rose
Gordon, Edna R.
Gordon, Fannie
Grace, Mary E.
Grassel, Mabel K.
Graves, Yvonne F.
Green, Elsie B.
Green, Edith L.
Green, Julia
Greenberg, Ethel
Greene, Marian E.
Greenwald, Benjamin
Grille, Josephine
Grosfeld, Joseph
Grosobel, Sarah
Guerin, J. Ligouria
Gutter, Henrietta
Haase, Clara
Hafer, Lella D.
Hall, Margaret
Hall, Rose
Hamburger, Hilda
Hanrahan, Loretta
Hanifin, Marguerite
Hansen, Dorothy M.
Hansbery, Helen
Hansbery, Kathryn
Hargrave, H. W. J.
Hatton, May
Hauser, Mary
Hecht, Augusta
Hecker, Elizabeth V.
Hefferman, Dorothy C.
Helprin, Dorothy (Mrs.)
Henderson, Elizabeth
Henzel, Alma
Herbert, Mary L.
Herriman, Lillian
Hertner, Sara
Heyert, Frances
Heymach, George
Hirsch, Louisa
Hoey, Anna L.
Hoffman, Anna H.
Hogan, Rose M.
Holmes, Dorothy
Holton, Rose Mary
Hope, Gertrude
Horan, Anna D.
Horberg, Mildred
Horbert, R. Marian
Horowitz, Ethel
Horstman, A. Florence
Hortich, Alice
Howard, Belle C.
Hurley, Denis F.
Hubbard, Maisie
Huck, Marjorie
Hughes, Margaret M.
Hume, Katherine
Hussey, Elizabeth I.
Huther, Dora
Hyde, C. E. (Mrs.)
Insler, Cecile
Irish, Emma E.
Jacobson, Esther
Jacobson, Sara
Jeffery, Florence A.
Jenme, Ida M.
Johnsen, Alpha I.
Johnson, Genevieve
Johnston, Edith I.
Johnston, Isabel R.
Jones, Anna A.

Jordan, Anna V.
Kahnn, Pauline L.
Kalisch, Charlotte
Kaplan, Henry
Karon, Esther
Karr, Minnie
Keating, Elizabeth F.
Kelleen, Anne C.
Kelly, Elizabeth M.
Kelly, Margaret M.
Kemler, Emilie
Kennedy, Elizabeth G.
Kennedy, Mary E.
Kershaw, Edna M.
Keyes, Helen A.
Kiernan, Frances
Kiernan, Marie C.
King, Catherine
King, Cora E.
Klein, Anna M.
Kleitman, Sophie
Knapp, Ethel E.
Koch, Helen A.
Kontorsky, Beatrice
Kopke, Emily
Korb, Gertrude
Korobow, Albert A.
Koster, Minnie L.
Kraemer, Lillian
Kraus, Lena
Krinfsky, Helen A.
Krooks, Caroline H.
Lachmund, Laura M.
Lafon, Thyrza
Langan, Eleanor
Larkin, Helene A.
Lawlor, Edward R.
Leahy, Joanna
Leech, Mary H.
Lefebore, Louise J.
Leff, Anna
Leffler, Katherine
Leigh, Alice
Leesnowitz, Nathan
Lemon, Alicia
Lendrum, Emma M.
Leone, Angela
Levine, Sylvia
Lewis, Etta S.
Lieberman, Bertha S.
Lieberman, Lena
Lieberman, Frederica E.
L'Hounedieu, Chas. F.
Lillis, James
Lindberg, M. Lillis
Lindey, Miriam
Lindlof, Johanna M.
Linehan, Katherine L.
Lipsky, Celia
Litchman, Mildred J.
Loche, Mary V.
Loudon, Edward
Lutz, Wilhelmina
Lynch, Josephine M.
Macaulay, Agnes
Macauley, Mary
MacCarthy, L. J. (Mrs.)
MacHale, May
Macklin, Clara
Madden, Anna
Madfes, Carrie
Magrath, Gladys E.
Malone, Mary
Maloney, Grace E.
Mandelowitz, Mollie
Markowitz, Fannie
Mars, Katherine W.
Marshall, Alma D.
Martin, Anna
Martin, Jane M.
Martin, Julia
Martin, Margaret
Maye, Kathleen L.
Mayman, Charlotte
Meegan, Angela R.
Meagher, Mary F.
Meffle, May A.
Melair, Victoria R.
Mellinger, May
Menge, Louise
Messineo, Concettina
Meyer, Edna M.
Meyer, Henrietta
Miles, Henrietta
Millea, Alice
Millman, Blanche
Minogne, Evelyn A.
Molloy, Catherine A.
Molt, Mildred
Monash, Louis
Moran, Helen
Moritz, Matilda
Morrissey, Katherine
Moss, Sarah F.
Mullin, Katharine
Murray, Florence
Murtha, Sarah B.
Musgrove, Louise
Mygraut, Percy L.
McCarty, Beatrice
McCay, Marie
McCue, James J.
McDermott, Anne
McDermott, Lucy
McDonald, Mary V.
McIntyre, Mary E.
McKenna, Edith J.
McKenna, Helen J.
McKinstry, Helen
McMahon, Clare
McMahon, Dorothy R.
McPherson, Grace P.
McVey, Elizabeth M.
Nelson, Florence
Nilson, Thekla
Nolan, Sarah M.
Novich, Fannie L.
Nowlan, Anna F.
Ochs, Grace M.
O'Connell, Mary F. B.
O'Connell, Julia
O'Connor, Alice
O'Connor, Edward P.
O'Conor, Mary Agnes
O'Donnell, Martha C.
O'Hara, Mary
O'Hara, May M.
O'Keeffe, Norah
Oldenbuttel, Clarence
Olsen, Esther
O'Malley, Mary
O'Neill, James
O'Neill, Julia
Oppenheimer, Lena
O'Reilly, Judith E.
Oppido, Galtana K.
Ostendorf, Edna
Osterman, Jennie
Park, Helen
Paulucci, Clare F.
Peterson, May J.
Petranto, Gertrude
Philippi, Lucy
Pickman, Marie
Pigott, Geo. F., Jr.
Platz, Augusta
Pony, Georgette
Powers, Mary R.
Pratt, Robert F.
Prinzing, Elizabeth
Prusslin, Isabelle
Pupella, Kate F.
Quick, Lydia E.
Rappaport, Elizabeth
Reardon, Mary P.
Reicherter, Evelyn
Rees, Viola E.
Regan, Helen
Regan, Josephine A.
Regan, Marie L.
Reid, Margaret
Reid, Margaret J.
Reilley, Anna I.
Reilly, Agnes M.
Reilly, Anna G.
Reilly, Arthur C.
Reilly, Helen E.

Reilly, Mary
Reilly, Mary L.
Reinschmidt, Edith
Reiss, Ottillie M.
Ripp, Genevieve E.
Rischan, Emma
Ritch, Clariette
Roberts, Sarah
Robinson, John
Robinson, Marion
Roe, Elizabeth H.
Roeder, Sylvia
Rogers, Mae
Rokeach, Lillian
Rorty, Mary K.
Rose, Mildred
Rosenberg, Miriam
Rothstein, Gertrude
Routh, Jennie
Routh, Martha
Royals, Edna
Roycraft, Mary E.
Rubin, Sara C.
Rubinstein, Louis M.
Rushforth, R. Roy
Rudden, Christine S.
Rueger, Irene
Rush, Margaret
Ryan, Cecelia
Ryan, Grace A.
Ryan, Marie
Satewicz, Mary B.
Saslaw, Sadie
Savercool, Mary E.
Scally, John
Scarlata, Joseph, Jr.
Schechter, Anna
Schilling, Amelia C.
Schoen, Beatrice
Schofler, I.
Schorr, Margaret
Schmidt, Dorothy G.
Schmidt, Matilda
Schreiner, Charles A.
Schwencke, Augusta N.
Schulze, Dora E.
Schneedeman, Rose
Schoenbrun, Maurice
Schorr, Margaret A.
Schroeder, Bertha E.
Schubach, Beatrice
Schultz, Annette
Schwabb, Charlotte M.
Scott, Helen
Secor, Mary L.
Seely, Merwyn
Seery, Anna V.
Seghers, Kathryn C.
Seibt, Gertrude R.
Seidenberg, Zipporah
Senn, Ella
Serman, Mae
Sharp, Laura
Shannon, Virginia
Sheahan, Mary E.
Sibley, Nita
Siebert, Frances N.
Silverstein, Augusta M.
Simermeyer, Harry
Simons, Lois M.
Singer, Rose M.
Sisk, Fannie E.
Sittinger, Rose E.
Slauson, Nina E.
Slattery, Elyse J.
Smith, Caroline P.
Smith, India H.
Smith, Julia A.
Smyth, Thomas J.
Socolof, Lena
Spilberg, Esther
Sprague, Margaret H.
Stanners, Mary C.
Stapleton, Josephine F.
Starnes, Grace P.
Steed, Mary M.
Steele, May B.
Steele, Ruth
Stein, Edna
Stein, Etta
Stern, Bertha
Stern, Eva
Stevenson, Robert L.
Stevenson, J. Ritchie
Storch, Bella
Stott, Anna
Stover, Helen B.
Strull, Henriette
Sullivan, Madeleine
Sulzner, Matilda
Sweeny, Cecile
Sweeny, Rose M.
Sweeting, Stella
Swift, William H.
Swinton, Miriam
Taleisnik, Jennie E.
Taleisnik, Esther M.
Tamany, Margaret M.
Taylor, Maude M.
Thompson, Edith E.
Thorn, Louis F.
Tierney, Mary A.
Tindall, Barbara E.
Tobin, Nellie
Tooker, Nellie
Torresi, Julia
Tortorice, Josephine
Touster, Lillian
Tracy, Katherine V.
Tully, John H.
Turner, Craig P. E.
Ventrelli, Vincentina
Vitelli, Grace C.
Vozech, Emily
Wadley, Anna L.
Waldstein, Natalie
Wallace, Mary H.
Walsh, Kathryn
Walsh, Mary J.
Walsh, Agnes P.
Walsh, Irene
Warager, Emma L.
Ward, Helen M.
Ward, Helen V.
Weart, Lillie M. (Mrs.)
Webb, Clarence L.
Weber, Julia T.
Weill, Mildred S.
Weimer, Marie
Weiner, Sadie A.
Weinstein, Harry
Weir, Harry L.
Weisberg, Rachel
Weissman, Henrietta M.
Weisman, Sarah
Weissenstein, Henry A.
Weller, Mary E.
Welwood, Florence
Weston, Ella M.
Whelan, Eunice A.
White, Ellen A.
Wick, Louise C.
Wiehl, Selma
Wiggins, Corinne
Wilckens, Alma E.
Wilhelmsen, Bertha
Wilkes, Pauline H.
Williams, Mabel
Wilson, Edwin F.
Winchell, Lawrence
Winter, Estelle G.
Witkowsky, Rose
Wolkenstery, Richard
Wubbenhorst, Edith
Wynne, Pauline
Young, Laurence J.
Zayoncheck, Rose
Zeankiewicz, Mary S.
Zener, Ida J.
Zugenhain, Wilhelmina M.
Zimmerman, Helen S. (Mrs.)

Candidates for the Degree of Master of Science in Education

Abrams, Jeanette F.
Achley, Annie W. S.
Adams, Evelyn S.
Ahearn, Anna G.
Baetenfeld, Theresa S.
Bassman, Gertrude
Beihoff, Belle
Berman, Abraham B.
Blackwell Mabel M.
Blay, Leon
Braverman, Louis
Brown, Isaac
Burger, I. Victor
Butler, Ethel
Cecile, Jessie
Cheney, Florence A.
Cheney, G. W.
Cohen, Abraham de W.
Cohen, Harry
Cohen, Morris
Conway, Loretto M.
Courtenay, Gregory A.
Cox, Joseph A.
Davis, Edythe E.
Delaney, Mary J.
Dicker, Mollie K.
Donohue, Mary C.
Driscoll, Cecelia F.
Duffy, Elizabeth F.
Fanning, Margaret V.
Fernschild, Wm. H.
Friedman, Celia J.
Friedman, David H.
Fritz, Amelia
Garland, Loretta
Goldstein, Beatrice
Goodman, Sadie
Goomnitz, Morris
Green, Hattie L.
Greene, Anna
Greene, Percy E.
Gross, Benj. P. J.
Guiney, John B.
Halprin, Rose L.
Handelsman, Max
Hershkowitz, Harry
Hirsch, Abraham
Hoerig, Caroline E.
Horst, Leo
Huggard, Ethel F.
Hurley, Mary
Jacobs, Morris
Johalem, Isabel
Keegan, Haveril
Langer, Felicia G.
Lapedos, Samuel J.
Lepsel, Elsie W.
Levine, Davis
Lidowsky, Fannie
Linker, Anna
Loeb, Celeste
Lubin, Sadie
Lustig, Emilie
MacLeod, William R.
Mangan, Jeremiah
Manning, Ella M.
Margolin, Manuel
Margulis, Herman
Massell, Alexander S.
Meade, Isabel
Meany, Katherine F.
Merritt, F. E.
Miles, Isabella B.
McHale, Madeline
McKay, Anna J.
McNulty, John F.
Newfield, Max
Novy, Mary E.
O'Brien, Anna C.
Pause, George D.
Peshkin, Jacob
Price, Isaac
Projan, Irving
Roberts, Donald A.
Roeszler, Eunice
Rosenberg, Marguerite
Rosenblum, Jacques C.
Ross, E. J. (Mrs.)
Sagor, Lillian
Saunders, Cecelia C.
Scarlata, Joseph, Jr.
Schaff, Hermina
Schenberg, Samuel
Schoenberg Bertha J.
Schutt, Edwin H.
Schwartzburg, Nathan'l
Shannon, Regina
Shapiro, Sarah M.
Shenen, Florence
Sher, Nathan
Siegel, Martin
Smith, Anna V.
Spears, Joseph
Specht, Louise F.
Stein, Samuel
Steinberg, Samuel
Stevenson, D. Franklin
Sweeney, William J.
Todd, Adele
Turner, Francis
Wagner, Jacob
Waltman, Samuel
Weickers, Clara A.
Weiss, Emanuel
Wheat, Susan E.
White, Albert C.
White, Charlotte
White, Mabel C.
Wilkinson, William J.
Wisansky, Belle
Wisansky, Louis
Zinner, Jacob

SUMMARY

For the Term Ending in February, 1922

Matriculated students.

Day Session (Main Buildings):

College of Liberal Arts and Science:

	Arts	Science	Social Science	Total
Upper Seniors	25	38	18	81
Lower Seniors	32	61	27	120
Upper Juniors	24	97	24	145
Lower Juniors	28	107	43	178
Upper Sophomores	19	92	26	137
Lower Sophomores	40	131	31	202
Upper Freshman	53	211	52	316
Lower Freshman	127	573	99	799
	348	1,310	320	1,978

School of Technology	25	
School of Business and Civic Administration	20	
Special Students	72	
		2,095

Evening Session:

Main Buildings:			
College of Liberal Arts and Science	714		
School of Technology	3		
School of Business and Civic Administration	19		
School of Education	10		
		746	
Commerce Building:			
School of Business and Civic Administration		783	
Municipal Building:			
School of Business and Civic Administration		6	
Brooklyn Branch:			
College of Liberal Arts and Science	519		
School of Business and Civic Administration	91		
		610	
			2,145

Afternoon Division:		
Candidates for the degree of B. S. in Education	606	
Candidates for the degree of M.S. in Education	122	
	728	
		4,968
Deduct for duplication		29
Total, Matriculated Students		4,939

Matriculated Students (grouped by Schools):			
College of Liberal Arts and Science:			
Day Session		1,978	
Evening Session:			
Main Buildings	714		
Brooklyn Branch	519		
		1,233	
			3,211
Deduct for duplication			29
			3,182
School of Technology:			
Day Session		25	
Evening Session		3	
			28
School of Business and Civic Administration:			
Day Session		20	
Evening Session:			
Main Buildings	19		
Commerce Building	783		
Municipal Building	6		
Brooklyn Branch	91		
		899	
			919
School of Education:			
Evening Session		10	
Afternoon Division		728	
			738
Special Students (Day Session)			72
Total, Matriculated Students			4,939
Non-Matriculated Students:			
Day Session			12
Evening Session:			
Main Buildings		1,802	
Commerce Building		1,976	
Municipal Building		533	
Brooklyn Branch		240	
			4,551
Afternoon Division:			
Candidates for Special Certificates		271	
Other Non-Matriculated Students		2,260	
			2,531
Total Non-Matriculated Students			7,094
Students in the Preparatory High School			1,432
[1] Aggregate Total			13,465

[1]For students in the Day Session during the term ending in June, 1921, but not the present term, see the following pages. For the enrolment of the Summer Session of 1921, see page 244.

STUDENTS OF THE DAY SESSION

During the Term Ending in June, 1921, but not during the Present Term

College of Liberal Arts and Science:

Upper Seniors	111
Lower Seniors	34
Upper Juniors	18
Lower Juniors	31
Upper Sophomores	32
Lower Sophomores	47
Upper Freshmen	82
Lower Freshmen	188
School of Technology	11
School of Business and Civic Administration	4
Special Students	64
	622

College of Liberal Arts and Science

UPPER SENIOR CLASS

S Appold, Geo. D.
S Baer, Herbert L.
S Bander, Morris
S Barnett, Israel
S Berger, Tobias
S Berlage, I. R.
S Birnbaum, George
S Blay, Leon J.
A Broder, Israel
SS Bublick, Emanuel
SS Chovenson, S. H.
SS Cohen, Jacob
S Cohen, Samuel
A De Rosa, John
A Dressler, Leo
SS Eliscu, Edward
SS Ellenoff, Louis
SS Feigin, George
S Fialkoff, Abr. I.
S Finkel, Abr. M.
A Finkelstein, H.
S Friedheim, L. H.
S Fourman, Victor
S Friedman, D. H.
S Goldberg, Barnett
S Goldsmith, Benj.
S Goldstein, David S.
S Goolker, Peisach
S Greenstein, Harry
A Grossman, Alex.
SS Halpern, Meyer
SS Hamburger, Gustave
S Heberlein, Arthur
S Hecht, Nathan H.
A Heller, Isaiah
A Hirsch, Hyman E.
S Horne, Frank S.
SS Horowitz, Arthur
A Hurwitz, Bernard
S Hyman, Samuel W.
SS Inselbuch, Simon
SS Jacobowitz, Hyman
S Jacobs, Edward
S Kamenetsky, David
S Katz, Isidore
S Katz, Solomon
S Kisver, Harry
S Kruth, Neils V.
A Lamm, Samuel S.
SS Lanchner, Abr. J.
A Lapan, Isidore
SS Lebowsky, Abr.
S Lehrman, Leo
S Leibowitz, Wm.
A Liebreich, Leon
A Lepowsky, Raphael
S Levinson, David
SS Lewit, James
S Lichtenstern, A.
A Lifschitz, Henry I.
S Littenberg, Moses
SS Lublin, Isidore
S Marcou, Milton
SS Margulis, Herman
SS Maroulis, Anthony
S Mattikow, Morris
S McCracken, W. H.
A Merkelson, Julius
A Miller, Jasper
S Mond, Morris
A Nathan, John B.
S Newman, Irving
SS Nunes, K. M.
A Papae, Norman
S Pincus, Leonard J.
SS Pokart, Simon
S Popkin, Maurice H.
A Rosenblatt, Samuel
A Sabato, Frank
S Sang, Louis
S Sargoy, Edward A.
S Schapiro, Isidore
SS Schectman, Saul
S Scheinker, David
S Schenkman, Harry
S Seligman, Harry
A Sellinger Benj.
S Sherman, Leo D.
A Shimberg, Ira J.
S Sicular, Henry
SS Siegel, Samuel
S Skach, Herbert S.
S Smith, Bernard
S Solomon, Isidore
A Sophian, L. H.
S Stander, Philip

S Stark, Herbert J.
A Stein, Samuel
A Strongman, H. R.
SS Studley, Liba H.
S Sussman, Henry
S Swift, Edward M.
S Ullman, John
A Ulmar, David
S Wahrhaftig, Jacob
S Weintrob, Morris
S Weiss, Theodore F.
S Whiteman, N. C.
S Wilkes, Barnett
S Wolfsohn, I. S.
SS Zimmerman, K. A.

LOWER SENIOR CLASS

S Bisgeir, George
A Boss, Alfred J.
S Burg, Harold
S Cacioppi, Thomas
SS Carlson, Samuel
SS Coll, Harry S.
S Cronenberg, S.
S Dlugatz, Hyman
S Emmer, S. W.
A Garratt-Phayme, Thomas A.
A Glasgal, Isidore
SS Grehan, M. J.
S Grouf, Meyer
S Hartman, I. M.
S Huber, Samuel S.
S Jacobs, Morris
S Jonas, Jerome
SS Karp, Max
SS Krause, Sidney
S Latter, Isidore
S Levy, Joseph
S Lindenauer, David
S Lindroth, L. V.
A Lubowitz, Nathan
A Maloff, Milton R.
A Naparsteck, Harry
SS Nasanow, David
S Poliakoff, Samuel
SS Schlesinger, Emil
S Schneider, N. A.
SS Schweizer, Jacob
S Smith, Jos. E.
S Unz, Adolph
A Weiss, Emanuel

UPPER JUNIOR CLASS

S Berlinsky, H. D.
SS Bloch, Joseph
S Friedrich, Morton
S Giambalvo, Anthony
S Kaplan, Harry
S Leifer, Wm.
SS Levine, Irving
SS Lewis, Merwin
S Lipman, Herman
S McKay, D. R.
S Paley, Samuel
S Ratner, Hyman
S Rausch, Max
S Reich, Abr. J.
S Sherman, Hyman
S Spitzer, Nathan
S Wilensky, Max
S Worken, Barney

LOWER JUNIOR CLASS

S Arlt, Robert E.
S Berkovsky, Max
S Bonaccolto, G.
S Bonyay, Lacey L.
S Glanzer, Joseph
S Goldberg, Abr. M.
S Greenberg, A. E.
S Gussow, Morris L.
S Kurz, Bernard
A Marx, Jacob
S Miller, Isidore
S Miowdownick, A.
SS Moore, Solomon
A Novotny, William
S Rooff, Sidney
A Roseman, Isador
S Rosenthal, Samuel
S Rubenstein, Samuel
S Sachs, Joseph
S Sandler, Morris
S Scharf, John H.
S Shapiro, M. A.
S Shapiro, Meyer J.
SS Sokol, Gustav
S Solomon, Nathan
S Taylor, Harry
S Warpick, M.
S Weiss, George
S Weiss, Sigmund
A Zankel, Harry T.
S Zucker, Benj.

UPPER SOPHOMORE CLASS

S Blum, Joseph
S Brauer, Louis H.
S Buffone, Ernest
S Davidoff, David
S Faber, Samuel
SS Feierman, Alex.
S Frankenberg, Harry
SS Friedfeld, M. H.
S Fuchs, Abner
S Gartner, Samuel
S Ginsburg, Alex.
S Goldberg, Geo. H.
S Greenwald, Murray
S Henzel, Herbert T.
S Horney, Leo
S Jacobs, Solomon
S Joseph, Louis
S Kaplan, Abr.
S Katzoff, David
A Knapp, Max
S Levy, Everett R.
S Nelson, Geo. E.
SS Pinckney, Joseph
S Pois, John
S Pupek, Bernard
S Robinsohn, Jacob
S Sarnoff, Jack
SS Schoch, Walter
S Segal, Louis
SS Smith, Russell A.
A Windhorst, John H.
S Wechsler, Julius

LOWER SOPHOMORE CLASS

S Ariola, Vincent
S Bartoli, Jos. F.
S Bernstein, Jacob
S Brizzolara, A. A.
SS Callaghan, N. P.
S Christianson, Theo.
SS Cowan, Marcy H.
S Duncan, Henry B.
S Fader, Bernard L.
S Falcon, Leon
SS Fogler, Sigmund
A Goldman, Max
S Harkavy, Joseph
S Hertz, Benjamin
SS Kahn, Bernard S.
S Kantorsky, M. A.
S Kirschner, Isidore
S Matus, Manuel L.
S McBrien, Hugh
S Miller, Morris
S Nussbaum, Samuel
A Penn, George J.
SS Quat, Jacob
S Rabinowitz, Max
A Rabinowitz, Moses
S Rubaum, M. L.

S Sachs, Nathan
SS Sager, Robert V.
S Scheinman, Israel
S Schiff, David
S Schlachetzky, B.
S Schure, Joseph
S Shapiro, Wm. R.
SS Sherman, Harold
S Shields, Samuel L.
S Silverman, I. A.
S Simon, Meyer
S Singer, Louis
SS Slobodof, Hyman
S Spevack, Samuel
S Stoler, Isidore
SS Thompson, Hardee
S Tolkowsky, Aaron
A Weinstein, S.
S Weitz, Abraham
S White, John J.
S Whiteman, Redvers

UPPER FRESHMAN CLASS

S Belen, Enrique
SS Bishin, Jacob
SS Bochicchio, V. A.
S Brisman, Benjamin
A Bruenn, Milton L.
S Buschnel, Samuel
S Ciambra, Joseph
S Clahr, Abraham
A Cooper, Philip
S Cooperman, H.
S Engel, Isidore
S Epstein, Hyman R.
SS Fischel, Leo
S Fogelman, Benj.
SS Friedman, Charles
S Friedman, Kadish
SS Friedman, Ralph
A Furshtenberg, Jos.
S Galack, David
A Greenberg, D. H.
SS Groff, Isidore
S Grosfeld, Morris
S Guarino, Antonio
A Gushin, Arthur A.
S Halpern, Marion
S Heyman, Harry
S Hoffman, Robert
S Jackman, Harold
S Jacobowitz, Wm.
A Jacobson, Louis
A Jarcho, Saul W.
S Kantor, Louis
SS Kaprow, Barnett
S Kaufman, Aaron D.
S Kaufman, Irving
S Kulick, Benj. D.
SS Latto, Archie
A Lease, Benj. M.
S Leav, Joseph
S Lebowitz, H. M.
S Levinsky, Maurice
SS Lewin, Aaron Wm.
S Markson, A. A.
A Martocci, F. T.
A McCarthy, John D.
S Meiselman, L. J.
S Meltzer, Philip J.
S Miller, George
SS Murphy, Edw. K.
S Newman, M. S.
S Novagodsky, S.
S Ohrstein, Samuel
S Orange, Samuel J.
S Ortiz, Emilio H.
S Papa, Ludwig G.
S Pech, Irwin
SS Phillips, Fitzgerald
SS Prodis, Paul P.
S Rimmerman, S.
S Rosen, Herman
S Rosenbaum, N.
S Rosenberg, Joseph
S Rosenblatt, Harry
S Roth, Nathan
S Rothbart, Sydney
S Rudick, Abraham
SS Satin, Joseph
S Serwer, Jesse J.
S Sherman, Samuel
S Sherman, Sol
S Smith, Solomon S.
SS Temliak, Isidore
SS Vincenty, Nestor I.
SS Waterman, A. H.
SS Weber, Harry
S Weinberg, A. A.
S Weinstein, Morris
S Weinstock, Nathan
A Wilner, Aaron M.
SS Woolff, Max
S Zimmerman, I.
SS Zimmerman, L. H.

LOWER FRESHMAN CLASS

S Abess, Leonard C.
A Albaum, Albin I.
S Andino, Perfecto
S Appelbaum, Louis
S Arbitman, David
S Astrowsky, Barnett
S Blum, Morris
SS Braverman, A. B.
S Brigadier, Leonard
S Brownstein, Geo. J.
A Burnett, Dillon
S Burnett, Maret
S Carp, Solomon
A Chapman, C. B.
S Cheifetz, Alexander
SS Cheng, H. T. T.
A Cohen, Abraham
S Cohen, Philip J.
S Cohen, Solomon
S Cohn, David
S Convisser, Nemo
A Cuniffe, Frank R.
S Davidson, Clement
S Decker, Joseph
S Duchesne, Miguel
S Epstein, Abraham
S Epstein, Wm.
A Evans, Robert E.
S Feldman, Jacob
S Ferragamo, M. A.
S Flesch, Irving J.
S Fluri, C. Bruce
S Fradkin, Wm.
S Frank, David
S Frankel, Harold
S Fruchter, Harold
S Gerken, Henry
SS Giller, Julius
S Ginnis, David
S Ginnis, Morris
S Ginzberg, H. N.
S Glaubach, Abr.
S Goldberger, Burton
S Goldfarb, Chas.
S Goorian, Barnett
S Goradetzky, J.
SS Gottlieb, Frank
S Grad, Samuel
S Greenberg, Joseph
A Greenberger, S. A.
S Greenfield, Joseph
A Greenstein, Morris
A Gross, Joel
S Grossman, Chas.
S Haber, Joseph
S Haberfeld, Martin
SS Hamburger, M.
S Hanigan, Peter G.
S Hechler, Jacob
SS Herdes, Benjamin
S Hershkowitz, A.
S Hewett, Charles
SS Hicks, Robert Lee
S Hirsch, Jacob
SS Hirschberger, E.
A Israels, Carlos S.

SS Jacobs, Arthur
S Jacobson, Wm.
S Joyce, Thomas
S Karchemsky, M.
A Karkus, Monroe
S Katz, Abraham S.
S Katz, Judah
S Keller, Morton
S Kiel, Meyer
S Kirsch, Louis
S Kirschenbaum, M.
S Klein, Emanuel
S Klein, Samuel H.
S Kliatshco, Solomon
S Kreezer, George
SS Kreinis, Hyman
SS Kurtz, Maurice
S Lader, Julius
SS Lamperis, John
S Landman, Max
S Laneri, Paul
S Lasky, Jacob
S Legezos, Sotirio
S Lenkowsky, Moe
S Levine, Harry D.
A Levine, Hyman R.
S Levine, Morris
S Levine, Nathan
S Levine, Philip
S Lifschitz, Leonard
S Lighston, R. B.
S Lovitz, Jacob M.
SS Mantler, Charles
S Marcus, N. W.
SS Mark, Moissei
A Markel, Emanuel
A Markow, Edward
S Mash, Joseph
A McGowan, John H.
S Menasche, Albert
A Mendelsohn, R. E.
S Meyer, Arthur
S Miller, Leon
S Miller, Morris M.
S Myaskofsky, Israel
S Nadel, Joseph
A Nagelschmidt, H. T.
S Nelson, Isaac
SS Nunberg, Jacob
S Ollstein, Philip
SS Osborne, Lester D.
S Palmer, Joseph
S Perilla, Jacob L.
A Perlstein, Alfred S.
S Petruzzi, Arthur F.
SS Plotkin, Isidore
S Primacove, Wm.
S Pritika, Morris
S Puro, Benjamin
S Rabinowitz, Moses
S Rankow, Jacob
S Raschkind, Joshua
S Rivlin, Solomon
S Rosenbaum, Abr.
A Rosenberg, Abr.
S Rosenberg, Joseph
SS Rosenberg, Morris
S Rosenberg, Lester
A Rosenberg, Wm.
S Rosenthal, Isidore
S Rothenberg, C. L.
S Rubinstein, E. A.
S Rudolph, Rubin
S Sahud, David
S Schifrin, Arthur
S Schneider, A. D.
SS Schnitzer, Samuel
S Schwartz, George
S Seife, Theodore
SS Selly, Abner
S Shapiro, Nathan
S Sheftel, Sidney
S Silver, Samuel
SS Singer, Samuel C.
S Smith, Thos. R.
SS Solomon, Jesse
S Sommer, Joseph C.
S Soskin, Edward
A Speiser, Ephraim
A Stein, Joseph H.
S Steinhardt, Joseph
S Steinkohl, Harry
SS Steisel, Abe
S Stern, Charles
S Sternberg, Irving
A Sternberg, Louis
S Sturla, C. A.
S Swanton, Herbert E.
S Taddeo, Andrew
S Teitelbaum, M. I.
S Tiber, Arthur M.
S Tobias, Lionel
S Trachtenberg, I.
S Trupin, Sidney
S Tunis, Philip
S Wachs, Barnet
S Wagner, Philip
SS Waintrob, Sidney
S Waller, Wm. L.
S Warshawsky, I.
S Webb, Edward J.
S Weingard, Isidore
SS Weintraub, Hyman
S Weiss, Adolph
S Weiss, Jacob
S Weiss, Morris
A Wilson, Cecil G.
S Wisooker, H. R.
S Wolf, Jacob
S Wohl, Hyman
S Zeviner, Hyman
S Zisfein, David

School of Technology

Bischof, Gustave J.
Castagnaro, Dominick
Davis, William
Donargo, Anthony
Ehrlich, Jefferson
Eisen, Jacob
Gothelf, Adolph
Klein, Alexander
Schwartz, David L.
Wolfson, Henry M.
Wren, William P.

School of Business and Civic Administration

Cirelli, Albert
Roth, Milton
Vogel, Donald
Wohl, David

Special Students

Benardete, Meyer
Berger, Milton
Bilik, Samuel
Borochow, Solomon
Brode, James I.
Bruckner, Robt.

Budin, Jacob
Candib, Bernard
Chenitz, Nathan
Dressler, David
Emanuel, Leon N.
Fairclough, Chas. S.
Feigin, Bernard
Feinberg, Nathan
Forman, Maurice
Friedman, George
Gabriel, John H.
Ginsburg, Abraham
Goetz, John B.
Gottlieb, Philip
Guishard, Arthur
Hanfling, Harry
Hartman, Isidore
Higger, Michael
Hou, T. P.

Hutner, George
Israels, Martin
Jackson, Luther P.
Jacobi, Mendel
Karmin, Joseph
Kruger, Joseph
La Mantia, Salvador
Lamkay, Hyman
Lazer, Abraham
Lerner, Max
Mande, Amant B.
Mastrov, William
McDermott, Frank
McLeod, Steven H.
McPherson, Victor L.
*Miller, Thomas G.
Nachmani, Ammihud
Needles, William
Nissen, John P.

O'Donnell, Ellsworth
Pabst, William
Palestine, Ira J.
Paul, Louis
Ravidowitz, Jacob
Resnick, Nathaniel
Rosenberg, Henry
Roth, Martin
Schrier, Maurice
Seidenstein, Jacob
Seligson, Harold
Semiatitsky, Isaac
Shmayeff, Alexander
Tanner, Louis
Tomberg, Benjamin
Weisel, Samuel
Weitzen, Samuel
Yarnall, Warren H.
Zemansky, Mark W.

*Non-matriculated.

DIRECTORY OF OFFICERS

BOARD OF TRUSTEES

BELLAMY, FREDERICK P.....204 Montague Street, Brooklyn

CHURCHILL, THOMAS W.....63 Wall Street

HYDE, JAMES W.....29 Broadway

KOHNS, LEE.....42 Warren Street

LARKIN, WILLIAM P.....416 West 13th Street

MCANENY, GEORGE.....111 Broadway

PRALL, ANNING S.....130 College Ave., Westerleigh, Staten Island

STROOCK, MOSES J.....141 Broadway

TUTTLE, CHARLES H.....34 Nassau Street

WEISS, ALBERT.....69 East 92nd Street

OFFICERS OF ADMINISTRATION AND INSTRUCTION

ABBREVIATIONS

Main —Main Building
C. H. —Compton Hall (Engineering Building)
Chem. —Chemistry Building
Hyg. —Hygiene Building
T. H. H. —Townsend Harris Hall
Com. —Commerce Building
Mun. —Municipal Building
Br. —Brooklyn Branch
Educ. —School of Education

Abbe, Cleveland, Jr.,	Main	625 S. Broadway, Yonkers.
Albrecht, Arthur E.,	Main	825 W. 178th St.
Alden, Henry T.,	Br.	185 Quincy St., Brooklyn.
Aldinger, Albert K.,	Educ.	369 W. 119th St.
Allen, James H.,	Educ.	68 Halsey St., Brooklyn.
Allen, Joseph,	Main	9 Myrtle St., White Plains.
Alles, Robert H.,	T. H. H.	137 W. 77th St.
Ambler, Robert A.,	Hyg.	78 Elwood St.
Andrews, William H.,	Br.	265 Hawthorne St., Brooklyn.
Appleby, Alfred Noel,	Main	30 Murray St., Flushing.
Arbib-Costa, Alfonso,	Main	500 W. 144th St.
Arland, Otto B.,	C. H.	Little Falls, N. J.
Arnold, Samuel B.,	Main	Darien, Conn.
Arundale, Henry B.,	Com.	36 Carleton St., E. Orange, N. J.
Atticks, Harry J.,	C. H.	116 W. 39th St.
Autenrieth, George C.,	Main	1628 St. Peter's Ave.
Babor, Joseph A.,	Chem.	1349 First Ave.
Baldwin, Samuel A.,	Main	611 W. 137th St.
Ball, Allan P.,	Main	544 W. 157th St.
Barker, LeRoy W.,	Main	58 DeKalb Ave., Brooklyn.
Baruch, Bernard	Com.	277 Albany Ave., Brooklyn.
Baskerville, Charles,	Chem.	611 W. 110th St.
Baum, Harry,	C. H.	825 W. 180th St.
Bayne, Stephen F.,	Educ.	25 Ft. Washington Ave.
Berenson, Moses,	Com.	1328 Broadway.
Bergeron, Maxime L.,	Main	429 Convent Ave.
Berk, David,	Com.	1414 46th St., Brooklyn.
Bernfeld, Lupescu Moritz,	Main	795 St. Nicholas Ave.
Bernner, Milton St. John,	Com.	46 Whitney Ave., Elmhurst.
Bernstein, Alton J.,	Br.	1043 So. Boulevard.
Bernstein, Samuel,	Main	98 Henry St.
Birmingham, Anna I.,	Educ.	1414 Pacific St., Brooklyn.
Blau, Benjamin L.,	Com.	1239 Simpson St.
Bliss, Henry Evelyn,	Main	25 Belden Ave., Dobbs Ferry.
Bonaschi, Albert C.,	Com.	1966 Valentine Ave.
Bowden, Joseph,	Br.	24 Clifton Place, Brooklyn.
Boyd, William B.,	Hyg.	121 E. 78th St.
Bradley, Barclay W.,	T. H. H.	145 W. 55th St.
Brand, E. R.,	Main	120 E. 95th St.
Bredekamp, Henry,	Main	59 East End Ave.
Brett, George Monroe,	Main	404 W. 116th St.

Brewster, John A.,	Main	728 W. 181st St.
Britton, Josephine,	Educ.	284 Lafayette Ave., Brooklyn.
Broas, Charles L.,	C. H.	229 W. 70th St.
Brolles, John E., Jr.,	Chem.	853 Westchester Ave.
Brophy, Daniel F.,	Main	514 Tenth Ave.
Brown, Carroll N.,	Main	10 Hamilton Ave., Yonkers.
Brown, Robert H.,	Com.	419 W. 119th St.
Brown, Stanley M.,	Main	1851 Seventh Ave.
Browne, William Ward,	Main	129 De Voe Ave., Yonkers.
Brownson, Carleton L.,	Main	164 W. 74th St.
Bruckner, Arthur,	C. H.	Hastings on-Hudson.
Bryan, Alfred C.,	Educ.	416 Clermont Ave., Brooklyn.
Buckley, Ambrose T.,	Com.	712 Decatur St., Brooklyn.
Burchard, Lewis Sayre,	Main	606 W. 147th St.
Burke, Edmund,	Main	135 Hamilton Place.
Burns, William H.,	Com.	545 W. 144th St.
Butler, Bertram T.,	Main	186 Crescent Ave., Leonia, N. J.
Byers, John R. B.,	Main	530 W. 136th St.
Byles, William E.,	Br.	Huntington.
Camera, A. U. N.,	Main	575 Dahill Road, Brooklyn.
Canfield, Leon. H.,	T. H. H.	325 Park Ave., Leonia, N. J.
Cantor, Samuel E.,	Hyg.	507 W. 134th St.
Castro, John,	T. H. H.	1175 Clay Ave.
Chase, Joseph C.,	T. H. H.	222 W. 23rd St.
Chertcoff, Moses,	Chem.	48 E. 98th St.
Clark, A. Mortimer,	Br.	1530 E. 17th St., Brooklyn.
Clark, John R.,	Educ.	27 Pelton St., Yonkers.
Coats, Harry Peter,	Chem.	605 W. 139th St.
Coe, Mrs. Annie C.,	Educ.	15 Argyle Road, Brooklyn.
Cohen, I. David,	Educ.	986 St. John's Place, Brooklyn.
Cohen, Morris R.,	Main	854 W. 181st St.
Cohen, Samuel N.,	Main	13 Russell Place, Brooklyn.
Coleman, A. I. du P.,	Main	244 Waverly Place.
Collins, Burtis H.,	Com.	540 W. 189th St.
Colwell, Wm. A.,	Br.	303 Caton Ave., Brooklyn.
Cook, George E.,	C. H.	504 Columbus Ave.
Compton, Alfred D.,	Main	371 W. 119th St.
Connolly, John M.,	Com.	10228 Ashland St., Richmond Hill.
Corcoran, Chas. A.,	Main	58 E. Kingsbridge Road.
Cosenza, Mario E.,	T. H. H.	54 Vermilyea Ave.
Costello, Charles,	C. H.	215 E. 102nd St.
Coulton, Thomas E.,	Main	602 W. 137th St.
Cox, James W., Jr.	Com.	320 Broadway.
Cox, Philip W. L.,	Educ.	531 W. 124th St.
Crandall, Ernest L.,	Educ.	33 Victor Place, Elmhurst.
Crandell, John S.,	Main	2226 Loring Pl.
Crater, Joseph F.,	Com.	540 Manhattan Ave.
Crowell, John Franklin,	Com.	89 N. Munn Ave., East Orange, N. J.
Crowne, J. Vincent,	Main	607 W. 138th St.
Cunningham, Jos. M.,	Com.	69 E. 93rd St.
Curtis, Robert W.,	Chem.	26 Walbrooke Rd., Scarsdale.
Curtman, Louis J.,	Chem.	547 W. 142nd St.
Dabney, Katherine,	Educ.	55 E. 86th St.
Dailey, John J.,	Hyg.	427 W. 162nd St.
Damen, Robert J.,	T. H. H.	370 Convent Ave.
D'Andrea, Albert Philip,	T. H. H.	2121 Bay Ave., Brooklyn.
Dariff, George,	Com.	1484 Eastern Parkway, Brooklyn.
Darling, Thomas,	Educ.	160 Marine St., City Island.
Das, Rajani Kanta,	Main	521 W. 122nd St.

Davis, Robert V.,	Main	6 E. 94th St.
De La Garza, Mrs. E.,	Com.	23 Depot St., Ridgepark, N. J.
des Garennes, Jean,	T. H. H.	285 Lincoln St., Flushing.
Dickson, Arthur,	T. H. H.	98 Morningside Ave.
Dobbins, Christine,	Educ.	611 W. 127th St.
Domerhuizen, John,	Educ.	423 E. 77th St.
Donohue, Thomas M.,	Educ.	73 Hampton St., Elmhurst.
Doolittle, Arthur K.,	Main	536 W. 112th St.
Downer, Charles A.,	Main	802 W. 181st St.
Dressler, Robert,	Main	636 Eleventh St., College Point.
Duggan, Stephen P.,	Main	11 Myrtle St., White Plains.
Dyer, Cecil Ballard,	T. H. H.	34 Grove St., Pleasantville.
Eaton, Joseph J.,	Educ.	98 Ravine Ave., Yonkers.
Edwards, George V.,	T. H. H.	1705 Montgomery Ave.
Eggleston, DeWitt Carl,	Main	245 Langdon Ave., Mt. Vernon.
Eibsen, Louis J.,	Com.	122 Park Ave., Leonia, N. J.
Elías, Alfredo,	T. H. H.	544 W. 157th St.
Estabrooke, John H.,	C. H.	431 Park Hill Ave., Yonkers.
Estabrooke, Wm. L.,	Chem.	12 Prospect Drive, Yonkers.
Ettari, Francesco,	T. H. H.	43 Mayflower Ave., New Rochelle.
Farnsworth, Edna A.,	Educ.	15 Central Ave., Tompkinsville.
Fecher, John Martin,	C. H.	85 Alexander St., Newark, N. J.
Fenderson, Mark,	T. H. H.	144 W. 23rd St.
Finke, Myron A.,	Com.	1182 Broadway.
Finn, John F. X.,	Main	2507 Clarendon Road, Brooklyn.
Finnerty, David Francis,	Main	616 W. 116th St.
Fischer, Ida E.,	Educ.	666 St. Nicholas Ave.
Fitzpatrick, Joseph E.,	T. H. H.	321 W. 51st St.
Flanagan, William J.,	Educ.	58 Cleveland St., New Brighton.
Fox, Abraham Manuel,	Com.	131 Saratoga Ave., Yonkers.
Fox, S. Wordsworth,	Educ.	418 W. 130th St.
Fox, William,	Main	457 W. 123rd St.
Fradenburgh, Adelbert G.,	Br.	182 Midwood St., Brooklyn.
François, Victor Emmanuel,	Main	710 Riverside Drive.
Frank, Charles L.,	Educ.	460 W. 149th St.
Friedman, Jacob A.,	T. H. H.	12 Hallett St., Astoria.
Fuentes, Ventura,	Main	518 W. 143rd St.
Fuld, Leonhard Felix,	Com.	60 Wall St.
Gardner, Arthur T.,	Educ.	9418 114th St., Richmond Hill.
Garritt, Albert W.,	Educ.	196 Sylvan Ave., Leonia, N. J.
Gaston, Charles Robert,	Br.	215 Abingdon Rd., Richmond Hill.
Gill, Bennington P.,	T. H. H.	971 Trinity Ave., Bronx.
Giltner, Emmet E.,	Educ.	85 Grant St., Yonkers.
Glaze, James B.,	Com.	37 W. 92nd St.
Goldberger, Isidore H.,	Educ.	2562 Grand Concourse.
Goldfarb, A. J.,	Main	98 Morningside Ave.
Goldsmith, Alfred N.,	Main	43 Fifth Ave.
Goldstein, Abraham M.,	Main	2515 Seventh Ave.
Goodman, Louis,	Main	470 W. 150th St.
Goodman, Theodore,	T. H. H.	612 E. 158th St.
Gottschall, Morton,	Main	947 Avenue St. John.
Grady, William E.,	Educ.	263 Dover St., Manhattan Beach.
Gray, Benjamin F.,	Educ.	2477 Grand Ave.
Gray, Herman A.,	T. H. H.	1226 Boston Road, Bronx.
Green, Howard C.,	Main	91 Fort Washington Ave.
Greenberg, Jacob,	Educ.	500 Park Ave.
Greenstein, Max B.,	Educ.	830 Kelly St.
Grendon, Felix,	Main	250 W. 85th St.
Grevé, Richard W.,	Main	520 W. 162nd St.

Gross, Alex.,	Main	14 Grafton St., Brooklyn.
Guilbaud, Lucien R.,	Main	195 Claremont Ave.
Guthrie, William B.,	Main	515 W. 111th St.
Haas, Harry H.,	Hyg.	502 W. 149th St.
Haight, Samuel C.,	T. H. H.	464 W. 152nd St.
Hall, Edgar Albert,	Br.	265 Monroe St., Brooklyn.
Halliday, Edgar,	T. H. H.	11 Strawberry Hill Ave., Stamford, Conn.
Hanburger, Fred W.,	C. H.	536 Grand Ave., Long Island City.
Hannig, William A.,	Educ.	2041 Fifth Ave.
Hanson, Canute,	Hyg.	2312 Loring Place.
Harrigan, James,	Educ.	323 Bement Ave., West Brighton.
Harrow, Benjamin,	Com.	2063 77th St., Brooklyn.
Hart, David,	Chem.	1425 36th St., Brooklyn.
Haskell, William H.,	Main	Scarsdale.
Hatch, Robert H.,	Main	164 W. 74th St.
Hayes, George M.,	T. H. H.	414 Beach 127th St., Belle Harbor.
Hayward, Joseph William,	C. H.	18 Engle St., Englewood, N. J.
Healy, Joseph X.,	Main	317 W. 134th St.
Heard, Walter S.,	Hyg.	31 Seaman Ave.
Heckman, Samuel B.,	Main	390 Wadsworth Ave.
Hein, Henry E.,	Educ.	594 E. 167th St.
Henderson, Ernest Norton,	Br.	179 St. James Place, Brooklyn.
Henry, Maxwell,	C. H.	142 W. 112th St.
Herrick, Charles Curtis,	Main	1466 Grand Concourse.
Herrley, Benjamin G.,	C. H.	1900 Benson Ave., Brooklyn.
Heynich, Richard O.,	T. H. H.	7 Valley Pl., Edgewater, N. J.
Hillyer, J. Blake,	Educ.	451 Jefferson Ave., Brooklyn.
Hinds, George Kent,	Com.	92 Riverside Drive.
Hirsdansky, Simon,	Educ.	110 Morningside Drive.
Hoffman, Alfred L.,	Mun.	342 President St., Brooklyn.
Hogan, Thomas A.,	Educ.	109 W. 225th St.
Holbrook, Rossiter,	Com.	Ossining.
Holman, Nathan,	Hyg.	371 Grand St.
Holton, Herbert M.,	Main	3872 Boston Road.
Holz, George G.,	Hyg.	2333 Creston Ave.
Horne, Charles F.,	Main	616 W. 148th St.
Houston, Charles A.,	Com.	200 Fifth Ave.
Hubert, Warren G.,	Main	125 Lee Ave., Yonkers.
Hunt, Leigh Harrison,	Main	600 W. 146th St.
Hutchison, Frederick W.,	T. H. H.	45 E. 59th St.
Hyde, Forrest,	Com.	106 W 71st St.
Iacuzzi, Alfred,	Main	640 60th St., Brooklyn.
Immediato, Gerardo,	Main	314 W. 94th St.
Iserman, Maurice,	Main	227 E. 66th St.
Jacobs, Newton Nevada,	Main	538 W. 143rd St.
Jahn, Richard,	Main	626 S. Ferry St., Woodhaven, L. I.
Jason, Simon J.,	Com.	436 Fort Washington Ave.
Jenkins, Henry E.,	Educ.	244 W. 11th St.
Jones, Michael A.,	Educ.	37 Beekman Place.
Jones, William B.,	Chem.	7 Maple St., Yonkers.
Judelsohn, Montefiore,	Br.	54 W. 40th St.
Judge, Mark,	C. H.	115 W. 89th St.
Kaltenborn, H. V.,	Br.	85 Willow St., Brooklyn.
Karlin, Harry,	Hyg.	1915 Mermaid Ave., Brooklyn.
Kayser, Georg,	T. H. H.	3756 Park Ave.
Keep, Austin B.,	Main	433 W. 117th St.
Keiley, Jarvis,	Main	214 W. 78th St.
Keleher, Michael J.,	T. H. H.	1027 Southern Boulevard.

Keller, Franklin J.,	Educ.	968 Anderson Ave.
Kelly, J. Redding,	Main	55 W 95th St.
Kelly, Thomas P.,	Main	535 Van Cortlandt Park Ave., Yonkers.
Kilpatrick, Van Evrie,	Educ.	30 Rumsey Road, Yonkers.
King, Cecile,	Educ.	780 Madison Ave.
Kinkeldey, Carl W.,	Main	1041 Faile St., Bronx.
Klapper, Paul,	Main	611 W. 137th St.
Klein, David,	T. H. H.	523 W. 143rd St.
Klein, Joseph J.,	Com.	440 West End Ave.
Knickerbocker, Wm. E.,	Main	400 Convent Ave.
Kohn, Frieda,	Educ.	51 Patchen Ave., Brooklyn.
Kost, Henry G.,	Main	472 E. 134th St.
Krowl, Harry C.,	Main	423 W. 22nd St.
Laffargue, Gaston A.,	Main	790 Riverside Drive.
Laffin, Charles W.,	Educ.	95 Lee Ave., Brooklyn.
Lang, John T.,	T. H. H.	121 E. 40th St.
La Rotonda, Oswald,	Hyg.	30 W. 127th St.
Lattin, Berton,	Hyg.	1235 Lexington Ave.
Lease, Emory B.,	T. H. H.	889 St. Nicholas Ave.
Leete, Harry Osborn,	Br.	713 Eastern Parkway, Brooklyn.
Lehrman, Alexander,	Chem.	130 Bradhurst Ave.
Lehrman, Leo,	Chem.	130 Bradhurst Ave.
Leighton, Roy F.,	Main	100 Convent Ave.
Levitas, Arnold,	Main	863 E. 176th St.
Lichterman, Dorothy,	Com.	664 W. 179th St.
Lichterman, Rose,	Com.	664 W. 179th St.
Lieberman, Elias,	Br.	10 Bleecker St., Brooklyn.
Liebgold, Sidney,	Chem.	1000 E. 179th St.
Linehan, Paul H.,	Main	346 Convent Ave.
Lister, Clyde C.,	Educ.	26 Waldorf Court, Brooklyn.
Locke, L. Leland,	Br.	950 St. John's Place, Brooklyn.
Lyman, Wm. Otis,	Com.	359 12th Ave., Astoria.
MacConnell, Marie Florence,	Educ.	19809 Beaufort Ave., Hollis, L. I.
MacDougall, Robert B.,	Main	137 W. 12th St.
MacNeish, Harris F.,	T. H. H.	Scarsdale.
McCartie, Harriet L.,	Main	219 W. 104th St.
McCormick, Radford J.	Hyg.	15th Ave. and 27th St., Beechhurst, L. I.
McHugh, John J.,	Educ.	196 St. John's Place, Brooklyn.
McKenzie, Lionel B.,	Hyg.	Grand Ave., Leonia, N. J.
McLoughlin, F. O. X.,	C. H.	706 Riverside Drive.
McNally, Elizabeth H.,	Educ.	15 W. 102nd St.
Mandel, Edward,	Educ.	44 Jewel St., Forest Hills.
Mandel, Frank E.,	Com.	25 Broadway.
Mann, Lawrence Bacon,	Com.	292 Grand St., Astoria.
Marcus, Alexander,	Main	Fort Lee, N. J.
Mariano, John Horace,	Com.	144 W. 11th St.
Marin, Rafael,	Com.	2305 Creston Ave.
Marique, Pierre J.,	T. H. H.	3270 Perry Ave.
Markett, Mark I.,	Educ.	665 W. 160th St.
Marks, Louis,	Educ.	230 W. 97th St.
Marsh, Howard D.,	Main	103 Overlook Terrace, Leonia, N. J.
Marshall, Florence,	Educ.	142 E. 40th St.
Martin, Earl A.,	Main	600 W. 146th St.
Marty, Nicholas,	Main	103 Truxton St., Brooklyn.
Maule, Warren M.,	Com.	162 W. Boulevard, Ridgewood, N. J.
Mead, Nelson P.,	Main	2352 University Ave.
Meister, Morris,	Educ.	11 Beverly Pl., Edgewater, N. J.

Meltsner, Max,	Chem.	1329 Clay Ave.
Mendelsohn, Charles J.,	T. H. H.	261 Edgecombe Ave.
Meunier-Guttin, Paul,	Com.	330 E. 51st St.
Meyer, Martin,	Chem.	435 Ft. Washington Ave.
Mezes, Sidney Edward,	Main	280 Convent Ave.
Michels, William, Jr.	Main	2603 Briggs Ave.
Miller, Henry, K., Jr.,	Chem.	130 Claremont Ave.
Miller, Julius Asher,	T. H. H.	220 Audubon Ave.
Moody, Herbert R.,	Chem.	63 Hamilton Terrace.
Mooney, William W.,	Br.	82 Downing St., Brooklyn.
Moore, Thomas R.,	Main	2071 Fifth Ave.
Morse, Leighton B.,	Main	206 Christie Heights, Leonia, N. J.
Morse, Livingston B.,	Main	400 W. 160th St.
Mosher, Joseph A.,	Main	106 Northern Ave.
Mott, Lewis F.,	Main	172 W. 79th St.
Nathan, John Bertram,	Main	216 W. 89th St.
Nelson, George E.,	Main	1242 Theriot Ave.
Neus, Engelbert,	Main	151 W. 80th St.
Newman, Samuel,	T. H. H.	517 W. 135th St.
Newton, Homer C.,	Main	41 St. Nicholas Terrace.
Norton, William J.,	Main	450 W. 152nd St.
O'Brien, Helen E.,	Main	Hotel Latham.
O'Connell, Daniel T.,	Main	525 E. 146th St.
O'Conor, Joseph A.,	Hyg.	272 W. 90th St.
O'Keefe, Emily A.,	Educ.	611 W. 127th St.
Olmsted, Robert E.,	Com.	191 Edgecombe Ave.
O'Neil, Richard J.,	Hyg.	759 St. Nicholas Ave.
Opdycke, John B.,	Educ.	139 W. 72d St.
Orr, William Walker,	Com.	147 E. 37th St.
Ostrow, Meyer J.	Com.	842 Hewitt Place.
Otis, Wm. Bradley,	Main	504 W. 112th St.
Overstreet, Harry Allen,	Main	802 W. 181st St.
Palmer, Earle Fenton,	Main	828 St. Nicholas Ave.
Palmer, Erastus,	Main	260 Convent Ave.
Palmer, Luella A.,	Educ.	510 W. 123rd St.
Panaroni, Alfred G.,	Main	130 W. 123d St.
Pappas, Charles M.,	C. H.	90 Edgecombe Ave.
Park, James Williams,	Br.	303 Fenimore St., Brooklyn.
Parker, S. Ridley,	Br.	28 Ormond Place, Brooklyn.
Parmet, Meyer,	Com.	820 Cauldwell Ave.
Patterson, Rowland,	Educ.	434 W. 120th St.
Patterson, William A.,	Com.	540 W. 149th St.
Paul, Francis H. J.,	Educ.	35 Bow St., Forest Hills.
Pearce, Walter H.,	Chem.	428 Ditmars Ave., Steinway, L. I. City.
Pearl, Joseph,	T. H. H.	865 W. 180th St.
Peckwell, Harry W.,	T. H. H.	2338 University Ave.
Pedersen, Frederick M.,	Main	452 W. 144th St.
Perrier, Joseph L.,	Br.	352 W. 115th St.
Perry, Arthur C., Jr.,	Educ.	163 Macon St., Brooklyn.
Peterson, Alfred L.,	C. H.	461 W. 140th St.
Peyser, Nathan,	Educ.	974 St. Mark's Ave., Brooklyn.
Philip, Maximilian,	Main	450 W. 149th St.
Philipson, Robert A.,	Main	Ossining.
Plock, Henry J.,	C. H.	15 Rochester Ave., Brooklyn.
Polinger, Elliot H.,	T. H. H.	1423 Wilkins Ave.
Prager, William L.,	Chem.	100 Morningside Drive.
Prashker, Louis,	Com.	200 W. 111th St.
Pugh, Alexander L.,	Com.	Pomona, Spring Valley, N. Y.

Purcell, Raymond F.,	Hyg.	1061 St. Nicholas Ave.
Quackenbos, G. Payn,	T. H. H.	Tuckahoe.
Redmond, Daniel W.,	Main	610 W. 178th St.
Reed, William E.,	Educ.	416 E. 9th St., Brooklyn.
Reutershan, Alfred D.,	Hyg.	305 E. 196th St.
Reynolds, Frederick G.,	Main	437 W. 147th St.
Reynolds, James J.,	Educ.	231 Park Place, Brooklyn.
Richter, Kurt E.,	T. H. H.	2730 Creston Ave., Bronx
Rider, Jack E.,	Hyg.	72 E. 93rd St.
Rifkin, Samuel,	Main	68 Grafton St., Brooklyn.
Roberts, John S.,	Educ.	610 W. 141st St.
Robinson, Devereux D.,	T. H. H.	68 W. 107th St.
Robinson, Frederick B.,	Main	400 W. 152nd St.
Rogers, Lawrence W.,	Com.	523 W. 138th St.
Rougier, Francis L.,	T. H. H.	Pleasantville.
Ruckes, Herbert,	Main	Dean and Fairmount Aves., Westchester.
Rupp, August,	Main	14 Hamilton Terrace
Russoff, Abraham N.,	Com.	728 W. 181st St.
Sanman, Louis F.,	Hyg.	181 W. 10th St.
Saphier, Conrad J.,	Com.	1062 Carroll St., Brooklyn
Saurel, Paul L.,	Main	524 W. 150th St.
Saxton, Lynn M.,	Main	601 W. 190th St.
Schapiro, J. Salwyn,	Main	12 W. 92nd St.
Scheiber, Max S.,	Com.	723 E. 5th St., Brooklyn.
Schlockow, Oswald,	Educ.	1162 Pacific St., Brooklyn.
Schmidt, George H.,	Hyg.	868 Columbus Ave.
Schnepel, John H.,	Main	155 S. Broadway, White Plains.
Schulman, Abram G.,	Main	346 E. 173rd St.
Schulz, Gustav F.,	Main	90 Pinehurst Ave.
Schutt, Arthur,	Chem.	9 Rockledge Pl., Yonkers.
Schutz, Meta Elizabeth,	Br.	110 Cambridge Place, Brooklyn.
Schuyler, Livingston R.,	Main	520 W. 114th St.
Schwartz, Thomas G.,	Main	921 St. Nicholas Ave.
Schwarz, Samuel A.,	T. H. H.	590 W. 172nd St.
Scott, George G.,	Main	6201 Broadway.
Semat, Henry,	Main	231 Eldridge St.
Senftner, Alexis E.,	T. H. H.	96 Hamilton Ave., Yonkers.
Sickels, Ivin,	Main	West Nyack.
Siegel, Morris E.,	Educ.	17 Washington Pl., West New Brighton.
Simonds, Stanley,	T. H. H.	18 Hamilton Terrace.
Skene, Frederick,	C. H.	411 Lockwood St., Astoria.
Slater, Florence W.,	Educ.	129 E. 10th St.
Smith, Harold H.,	Educ.	2116 Harrison Ave.
Smith, Philip L.,	T. H. H.	176 Waverly Place.
Smith, Robert F.,	Main	463 W. 144th St.
Snell, Foster Dee,	Chem.	830 W. 179th St.
Snider, Guy Edward,	Main	401 Marlborough Road, Yonkers.
Sobel, Bernard,	Com.	316 W. 28th St.
Sonkin, Simon,	T. H. H.	347 Hudson St.
Spitzenberg, Harry M.,	C. H.	78 Jarvis Place, Lynbrook.
Springer, Isidore,	Educ.	34 88th St., Woodhaven.
Stair, Bird,	Main	25 St. Nicholas Terrace.
Stalb, Walter,	Main	516 W. 148th St.
Stevenson, Reston,	Chem.	436 Convent Ave.
Stewart, Minnie M.,	Com.	19 W. 103rd St.
Stich, Herman J.,	Com.	961 St. Nicholas Ave.
Stitt, Edward W.,	Educ.	1543 St. Nicholas Ave.

Stone, Limond C.,	Br.	148 Putnam Ave., Brooklyn.
Storey, Thomas A.,	Hyg.	99 Claremont Ave.
Strumpf, Harold,	Com.	857 Crotona Park North.
Sufrin, Oscar J.,	Main	35 W. 110th St.
Sugarman, Arthur M.,	Com.	556 W. 140th St.
Swann, Harvey J.,	Br.	57 Gates Ave., Brooklyn.
Taaffe, Thos. Gaffney,	Main	1 Pinecrest Drive, Hastings.
Tallent, James E.,	Com.	56 Markuse St., Brooklyn.
Tanenbaum, Samuel,	Educ.	Morsemere, N. J.
Tasch, Ulysses S.,	Com.	1270 Broadway.
Taylor, Charles R.,	Com.	968 Sherman Ave.
Teeter, Charles H.,	Mun.	687 Rugby Road, Brooklyn.
Thaler, Harry,	Hyg.	1800 Seventh Ave.
Thomas, John B.,	Main	624 W. 207th St.
Thompson, B. M.,	Br.	622 48th St., Brooklyn.
Thompson, Holland,	Main	102 Waverly Place.
Thuor, Louis,	Chem.	2558 Creston Ave.
Tourte, Martha S.,	Educ.	204 Maple St., Brooklyn.
Toussaint, Camille A.,	T. H. H.	3688 Boulevard, Jersey City.
Tressler, Jacob Cloyd,	Br.	115 Pembroke Pl., Kew Gardens.
Troy James Henry,	C. H.	461 W. 140th St.
Troyansky, William,	T. H. H.	5 Goerck St.
Truesdell, Waldo B.,	T. H. H.	143 Beach Ave., Mamaroneck.
Tulgan, Joseph,	Main	1327 44th St., Brooklyn.
Turner, Alva,	Main	565 W. 113th St.
Turner, Arthur B.,	Main	245 N. Mountain Ave., Montclair, N. J.
Turner, Egbert M.,	Main	120 Devoe Ave., Yonkers.
Turner, John P.,	Main	520 W. 122nd St.
Tynan, Joseph L.,	T. H. H.	638 W. 160th St.
Valente, John,	T. H. H.	184 Eldridge St.
Van Alstyne, William T.,	Com.	128 Broadway.
Vance, Rufus A.,	Educ.	1253 Carroll St., Brooklyn.
VanDenburg, Joseph K.,	Educ.	450 Audubon Ave.
Vanderbrook, Raphael H.,	Main	1079 Hancock St., Brooklyn.
Veit, Benjamin,	Educ.	Healy Ave., Far Fockaway.
Viertel, Samuel,	Educ.	61 Wall St.
von Klenze, Camillo,	Main	62 W. 102nd St.
Voorhees, Arlene B.,	Br.	662 St. Mark's Ave.
Waag, Herman B.,	C. H.	225 Beach 120th St., Rockaway Pk.
Wade, John E.,	Educ.	2267 Andrews Ave.
Wade, Joseph H.,	Educ.	454 W. 153rd St.
Wallace, George H.,	Chem.	501 W. 113th St.
Walsh, Elizabeth A.,	Educ.	404 W. 116th St.
Walsh, John V.,	Main	570 W. 191st St.
Weber, Frederic L.,	Chem.	420 E. 141st St.
Weill, Felix,	Main	402 W. 153rd St.
Weinberg, Louis,	T. H. H.	58 W. 87th St.
Wells, Guy F.,	Educ.	110 Sherwood Ave., Yonkers.
Weston, Arthur James,	Com.	160 N. 18th St., E. Orange, N. J.
Wetzel, Reinhard A.,	T. H. H.	218 Tecumseh Ave., Mt. Vernon
Wheeler, Frank W.,	Hyg.	533 W. 151st St.
White, James F.	Chem.	520 W. 123rd St.
Whiteside, Donald,	Main	522 W. 157th St.
Whipple, Herbert S.,	Main	University Club.
Whitford, Edward E.,	Main	3681 Broadway.
Whitman, Bret Harte,	Com.	611 West 180th St.
Whyte, W. Alexander,	T. H. H.	Woodlawn Ter., Beechhurst, L. I.
Wickham, Joseph F.,	T. H. H.	513 W. 144th St.

Wilbert, Abraham L.,	Com.	1269 College Ave.
Williamson, Walter,	Hyg.	962 Anderson Ave.
Winfield, Richard M.,	Main	308 W. 97th St.
Wisan, Harold,	Br.	846 E. 156th St.
Wolchonok, Louis,	Com.	1068 E. 15th St.
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